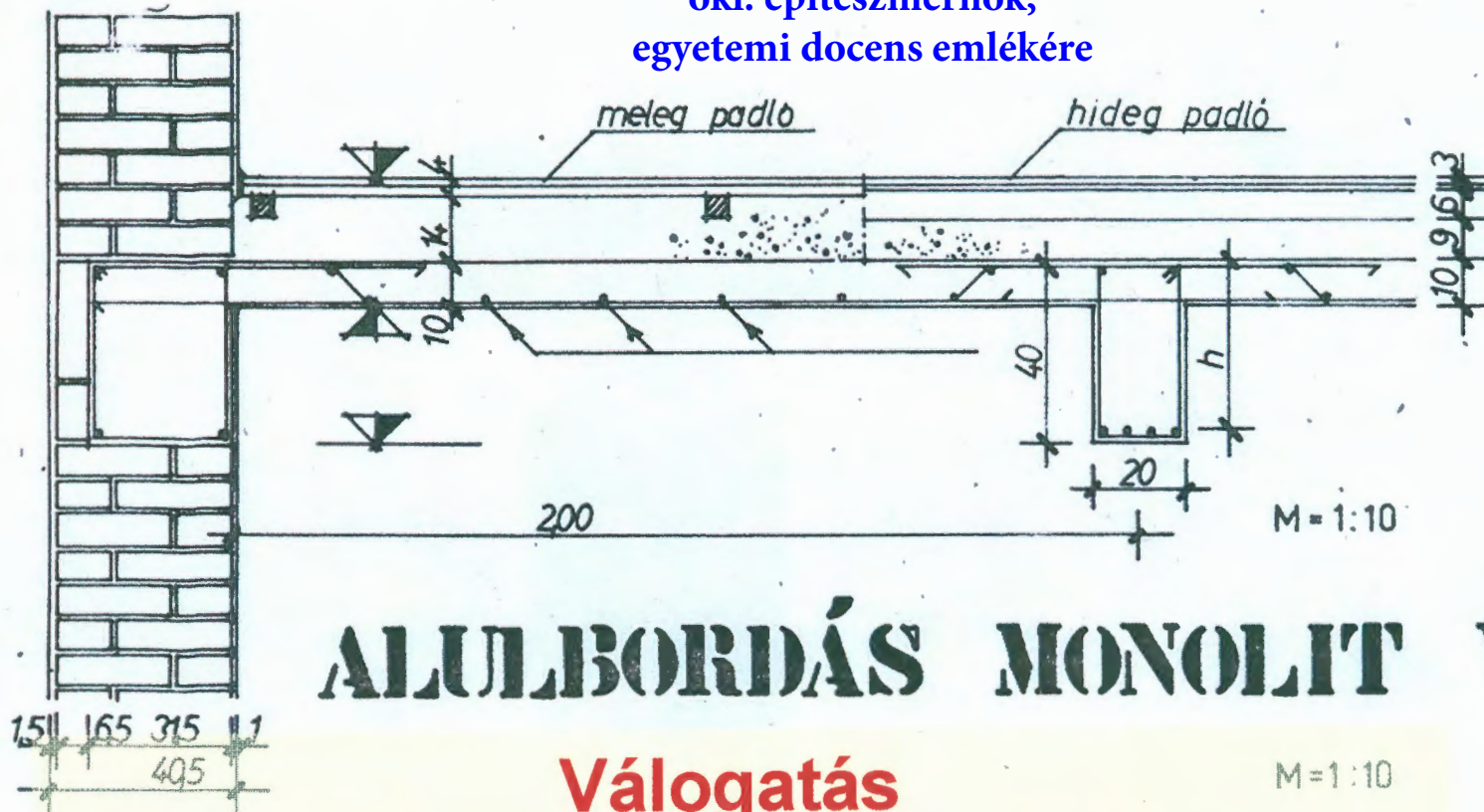


BRÚZSA LÁSZLÓ (1932-2005)

okl. építésmérnök,  
egyetemi docens emlékére

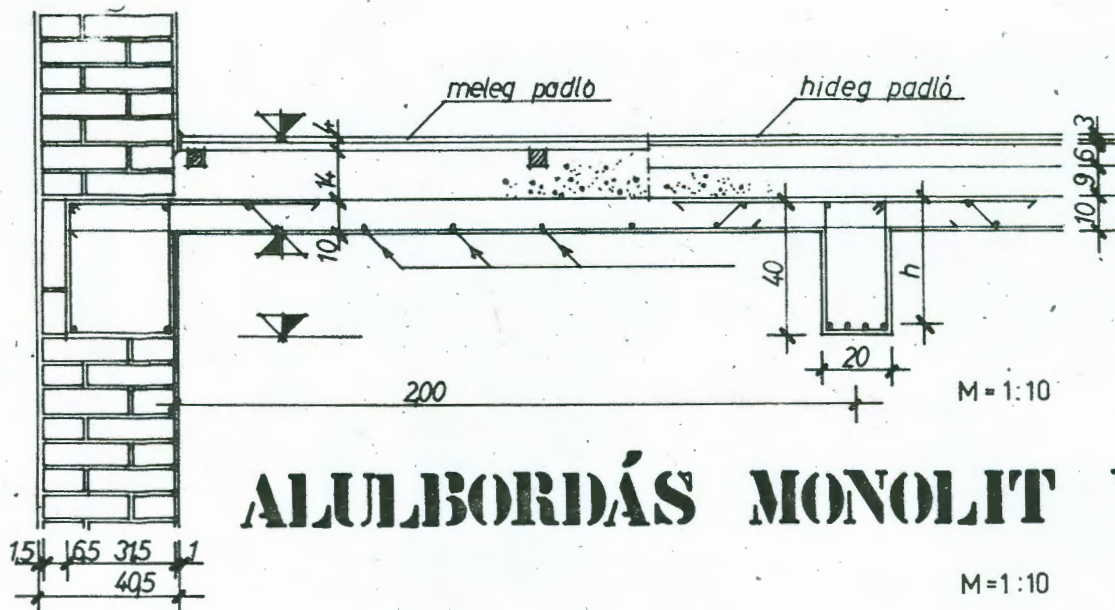


# ALULBORDÁS MONOLIT VB

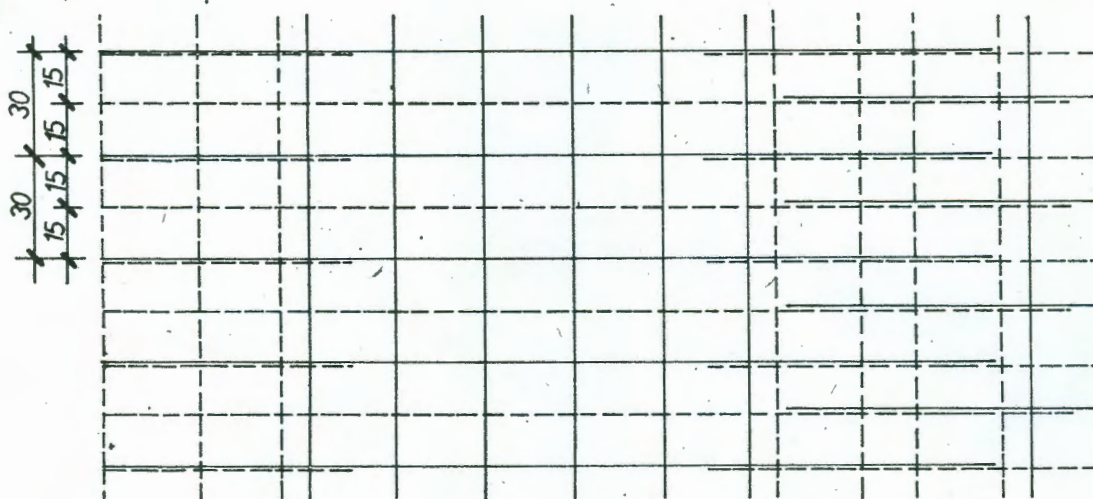
Válogatás

**BRÚZSA LÁSZLÓ** tanár úr  
(BME Magasépítési Tanszék)

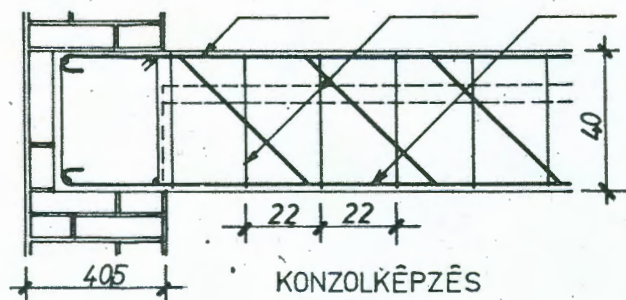
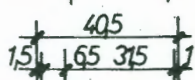
1967-1968-ban készített födémrajzaiból



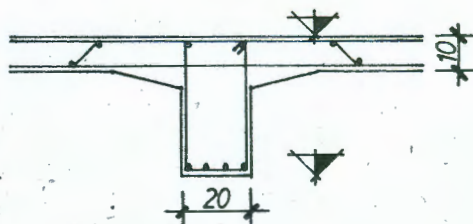
# ALULBORDÁS MONOLIT VB



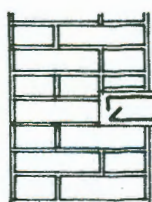
VASALÁS SÉMÁJA



KONZOLKÉPZÉS  
BORDÁNÁL



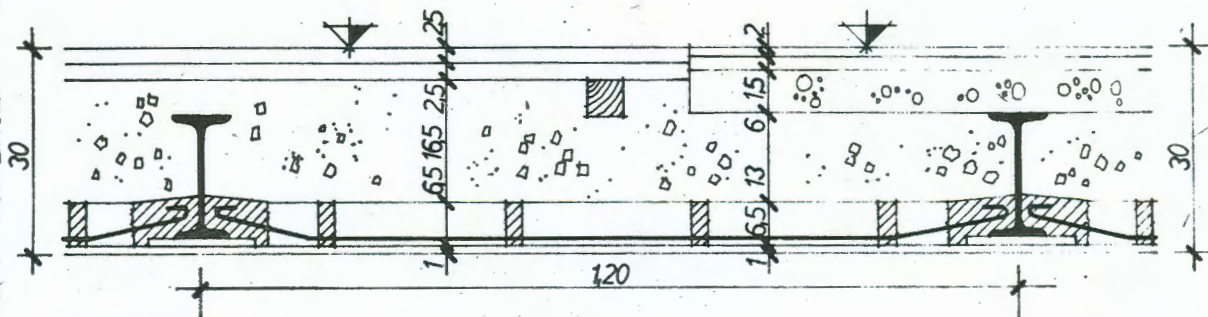
FÖDÉMSÜLY -  
HIDEGPADLÓ - 520-540 KP/m<sup>2</sup>  
MELEGPADLÓ - 400-420 KP/m<sup>2</sup>



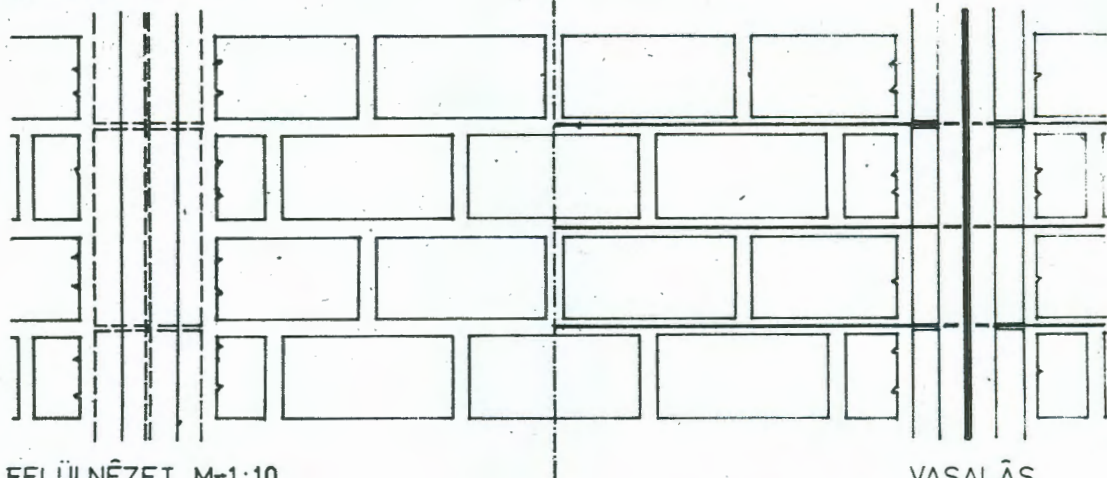
LEMEZBEFOGÁS

M = 1:10

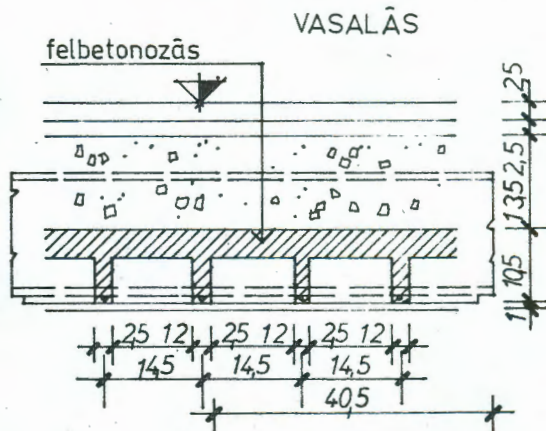
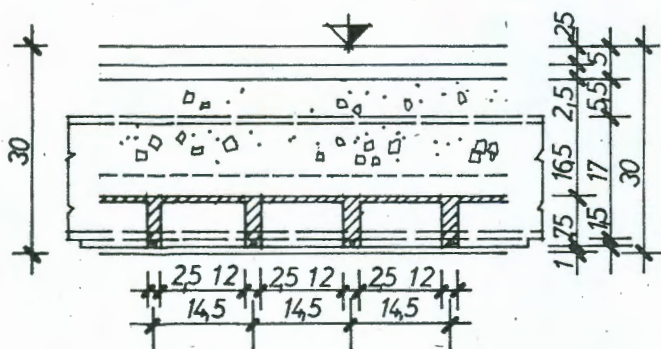




METSZET M=1:10



FELÜLNÉZET M=1:10



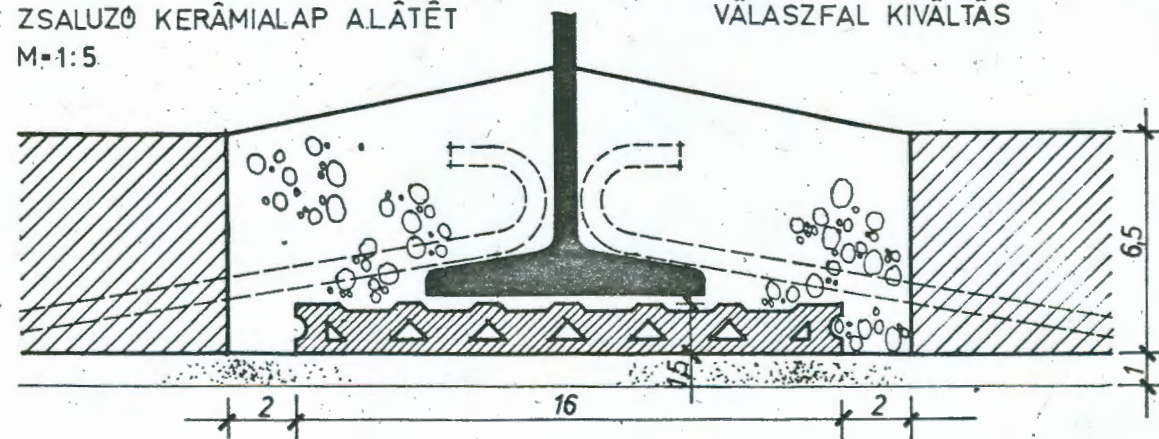
VASALÂS

# HORCSIK

## LEMEZ HOSSZMETSZETEK



KÖSZÖRUMETSZET LEMEZCSAT-  
LAKOZÁSNÁL





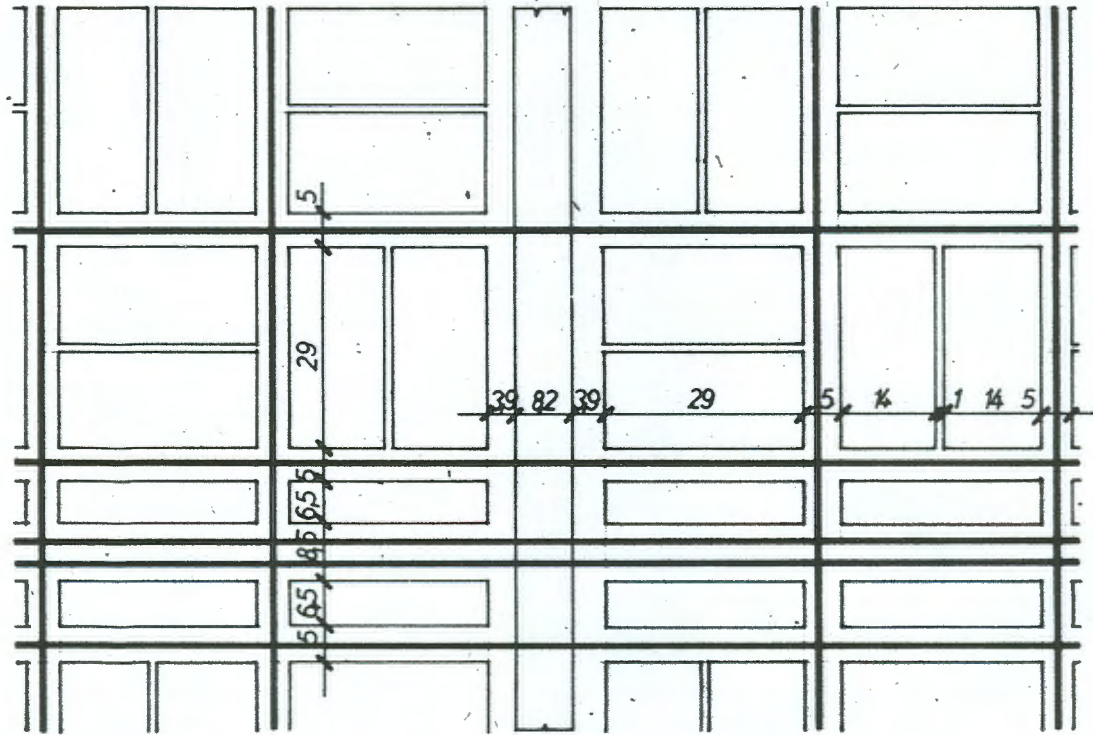
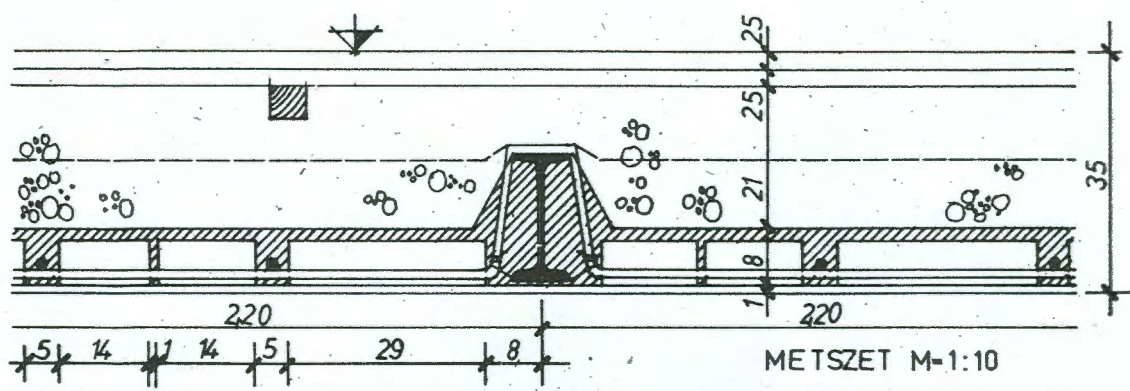
# ACÉLGERENDÁS

[illegible]

KOSZORUSIK

ACÉLGERENDA KOSZORUKAPCSOLAT M=1:10

GERENDAKIOSZTÁS  
KÖZÉPFÖFALAK  
FELETT M=1:100

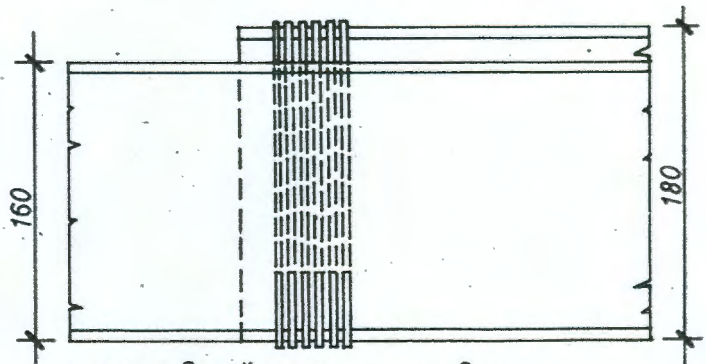
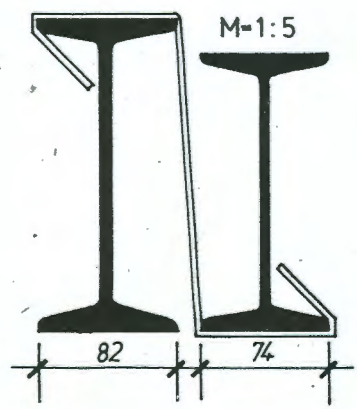


BETONOZOTT BORDA ÉS LEMEZ VÁSALÁS M=1:10

5

# ACÉLGERENDÁS

SZÉKELY-FÉLE TÖBBTÁMASZUSÍTOTT FÖDÉM



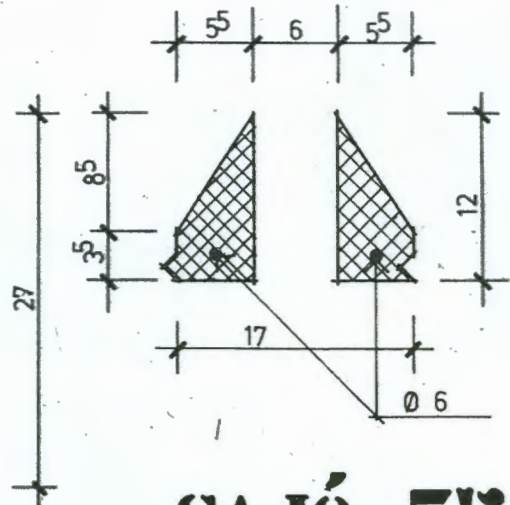
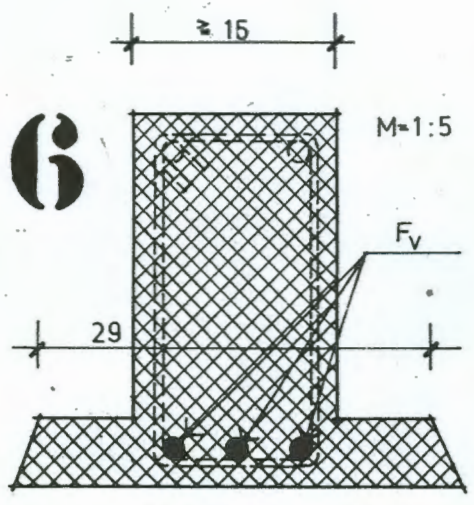
GERENDÁK ÖSSZEKAPCSOLÁSA



6

M=1:5

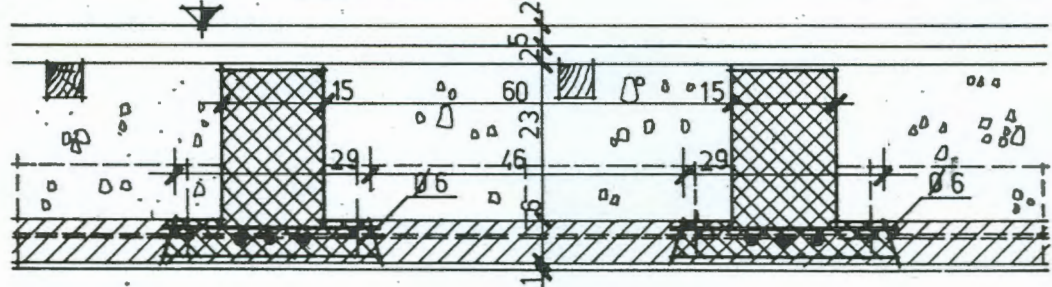
F<sub>V</sub>



SAJÓ-73

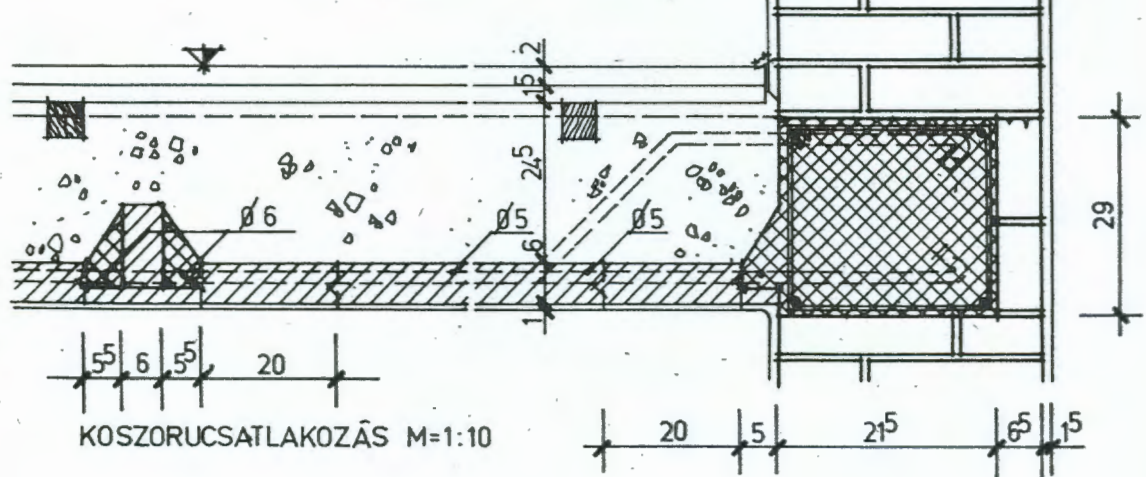
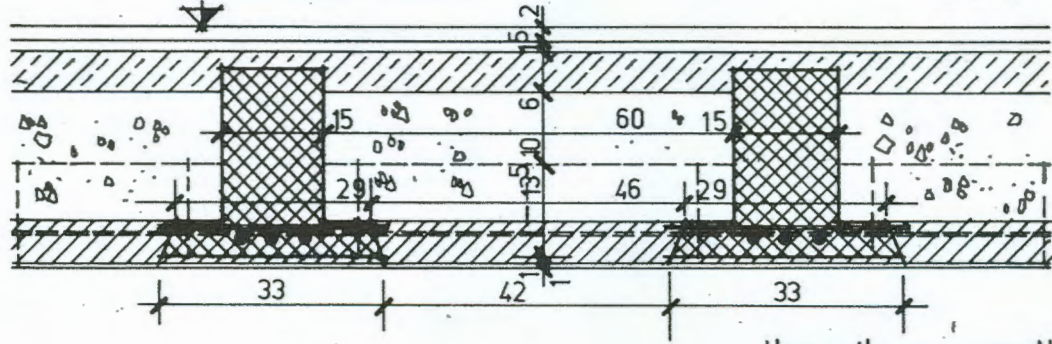
FELÜLBORDÁS FÖDÉM M=1:10

MELEGPADLÓS FÖDÉM



HIDEGPADLÓS FÖDÉM

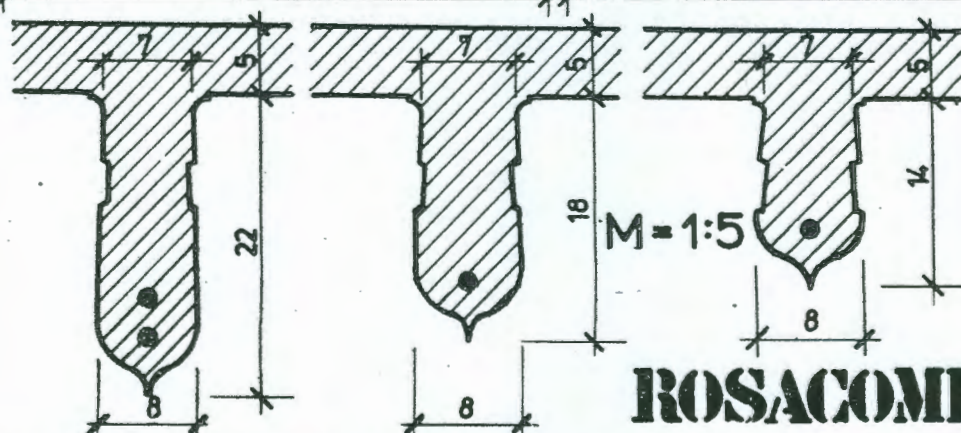
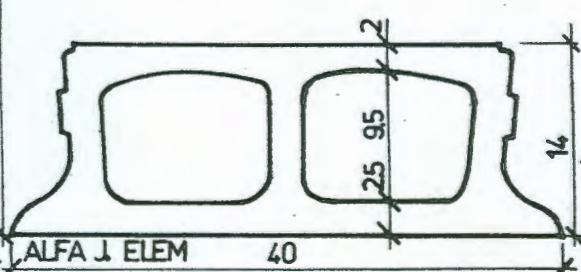
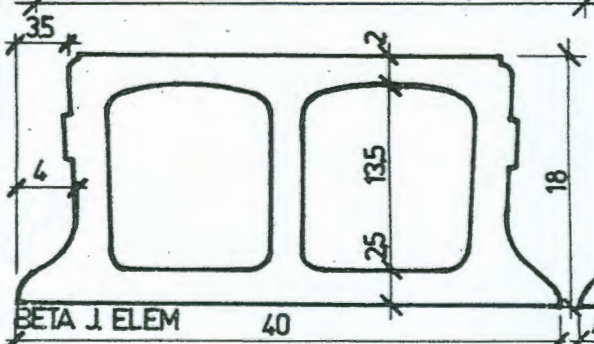
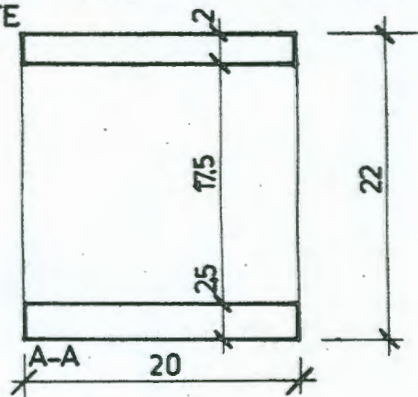
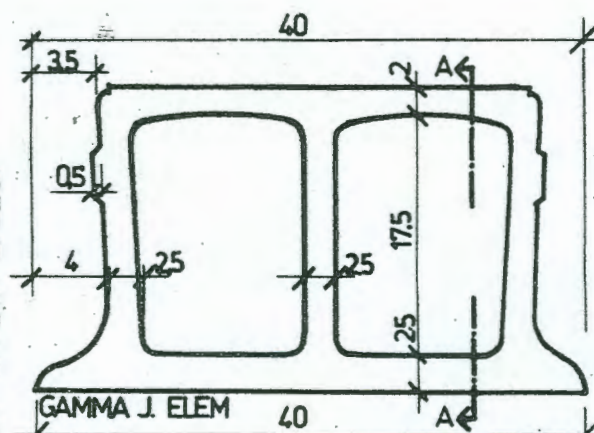
M=1:10



KOSZORUCSATLA KOZÁS M=1:10



ROSACOMETTA CEMENTKÖTŐANYAGÚ FÖDÉMELEMEK KERESZT-ÉS HOSSZMET-SZETE



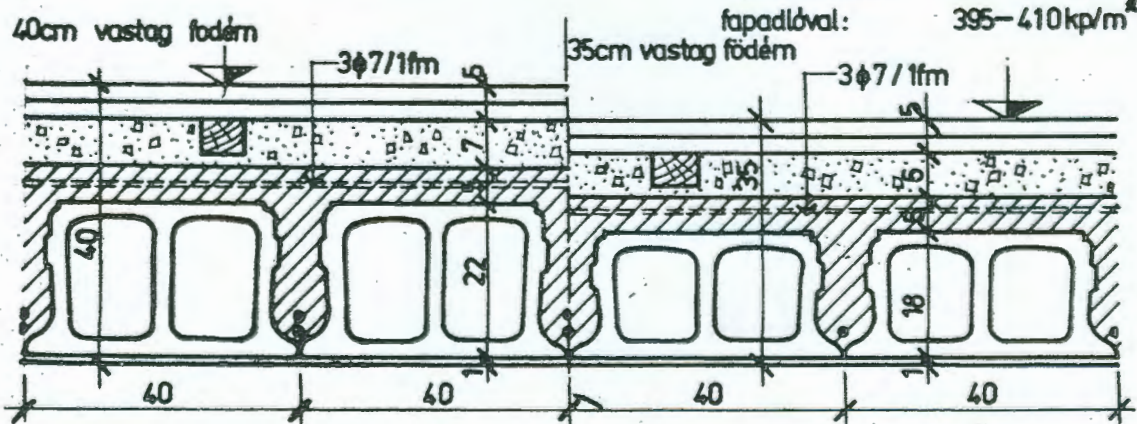
**ROSACOMETTA**

elemek közötti vasbeton bordák metszetei

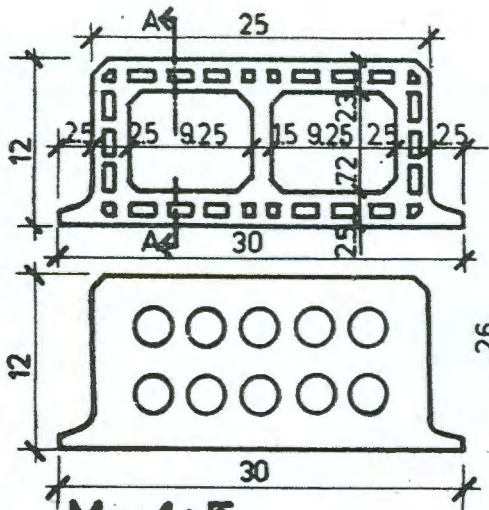
35 cm vastag födém önsúlya:

lapburkolattal: 515-530kp/m<sup>2</sup>

fapadlóval: 395-410kp/m<sup>2</sup>

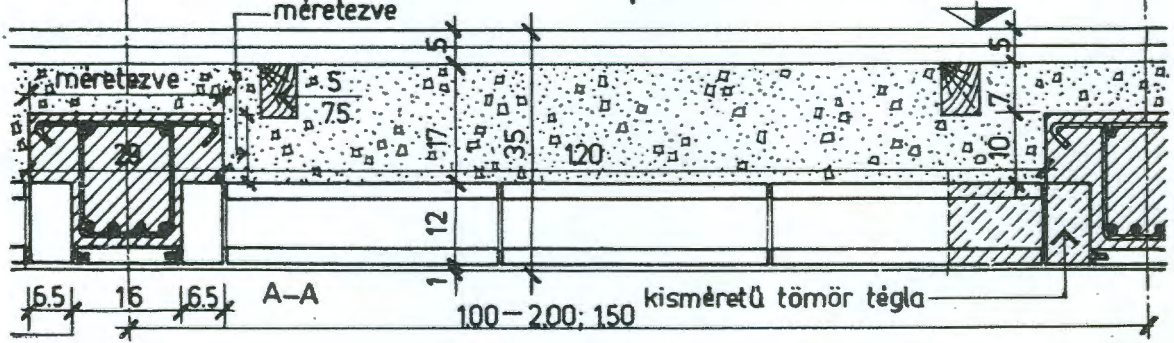
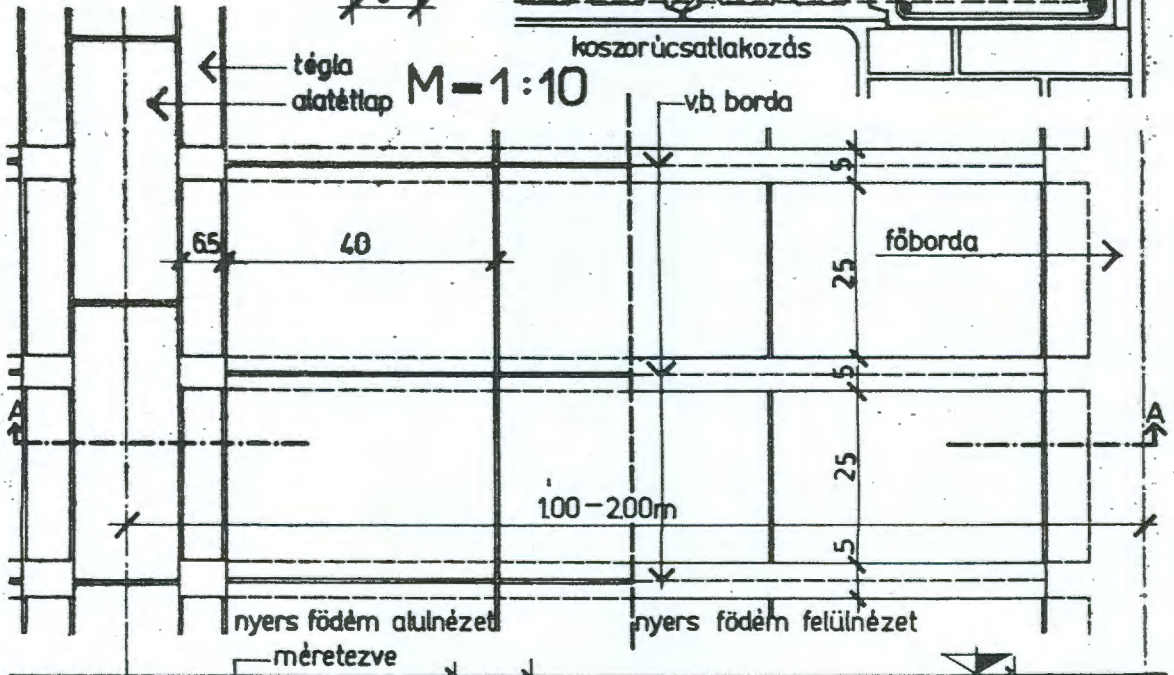
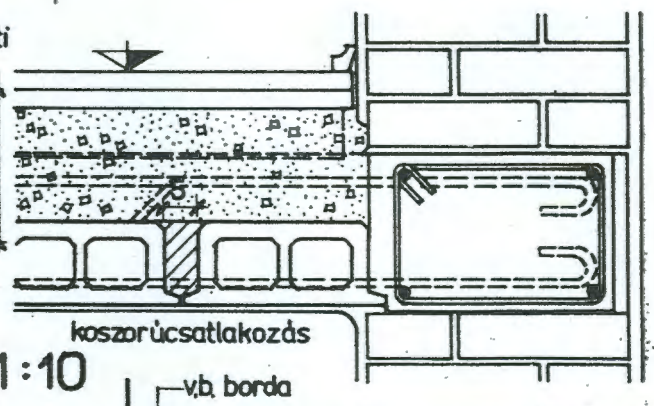
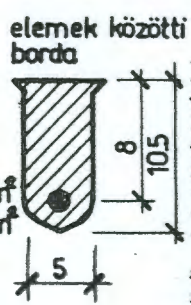
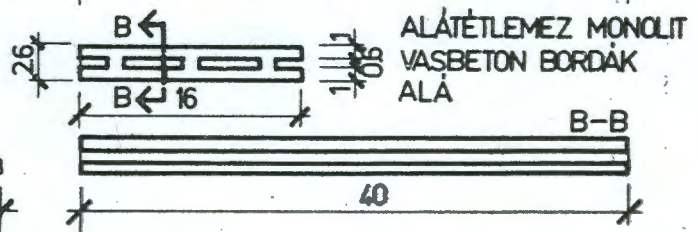
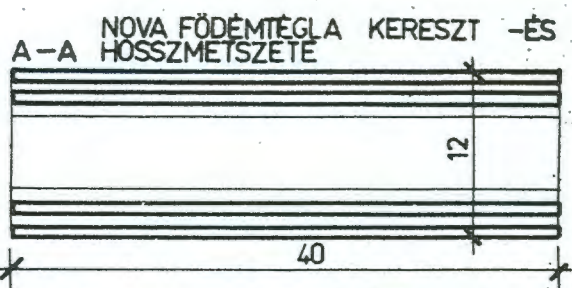




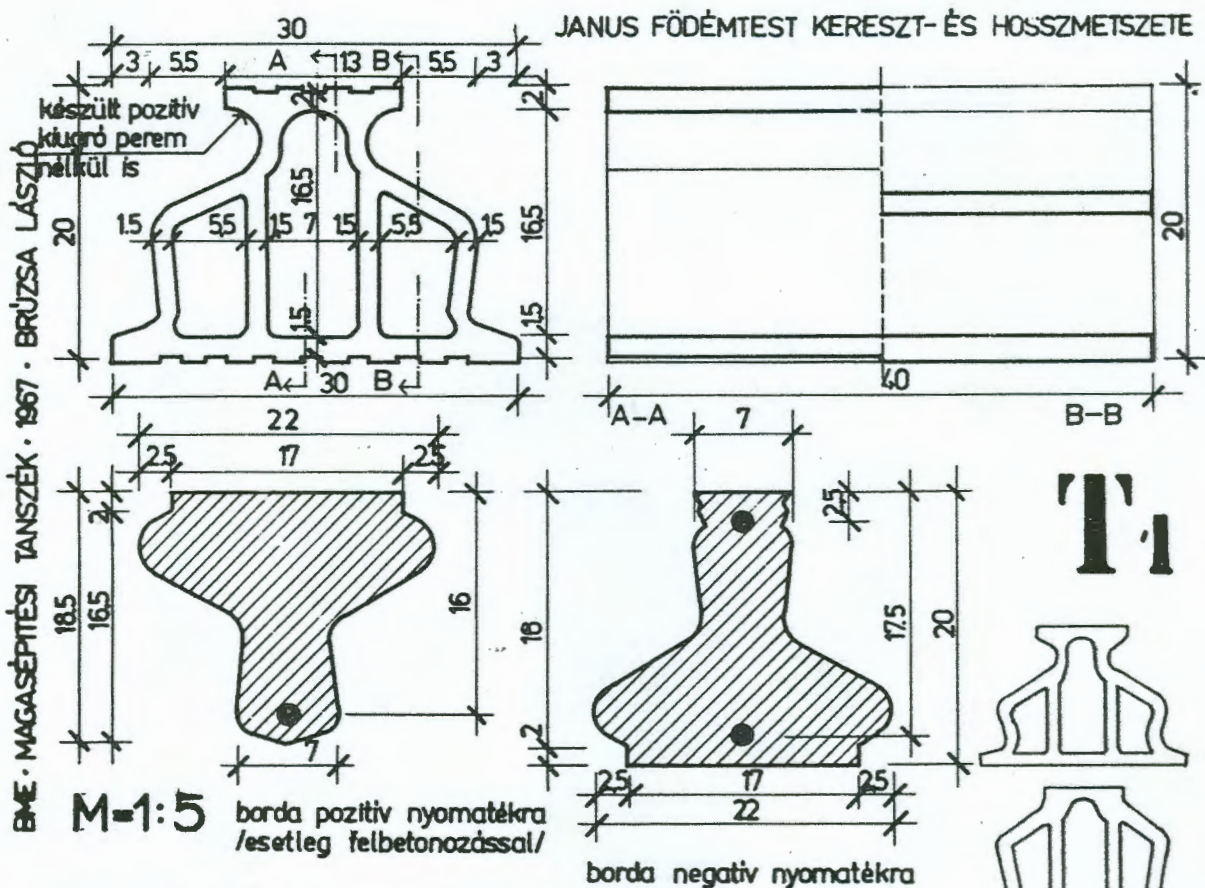


M-1:5  
**NOVA**

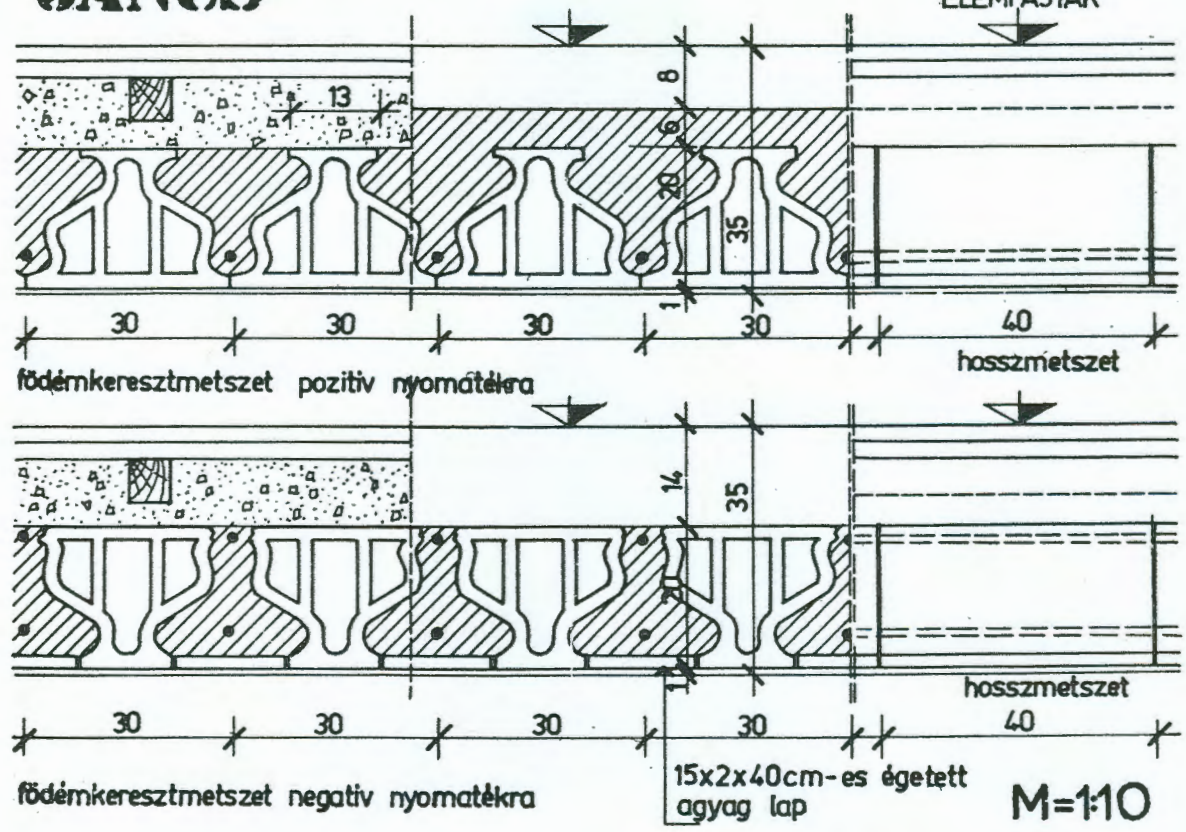
35cm vastag födém  
önsúlya:  
hidegpadló: 620-650kp/m<sup>2</sup>  
melegpadló: 500-530kp/m<sup>2</sup>







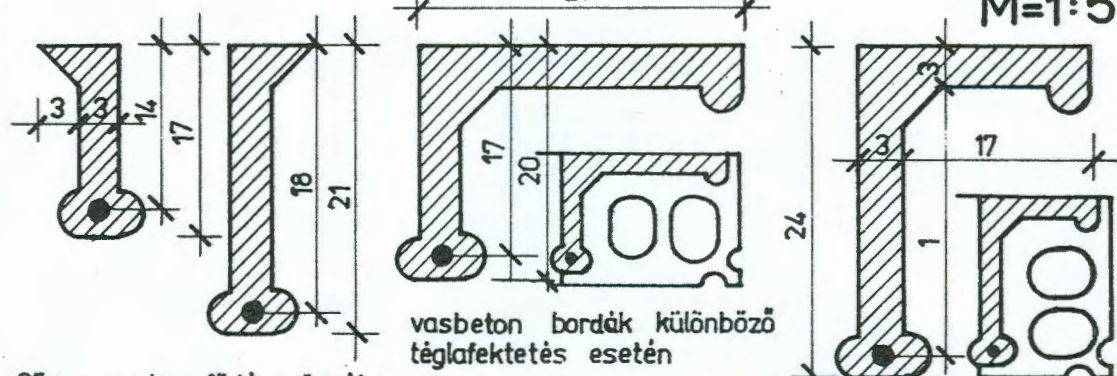
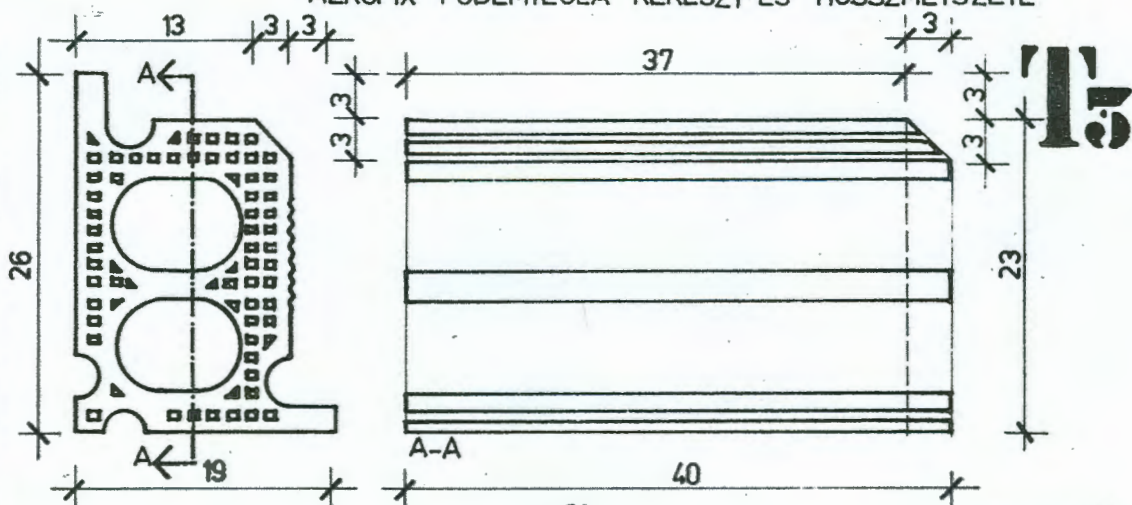
# JANUS







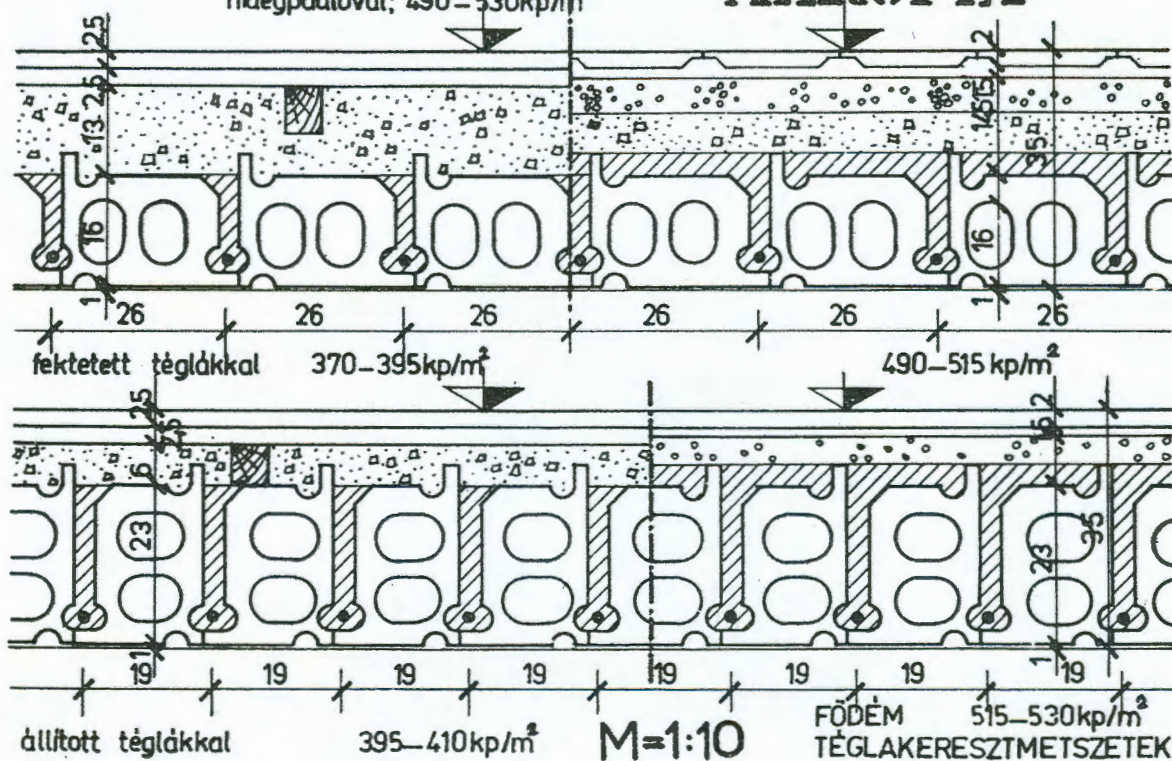




35cm vastag fődém önsúlya:

hidegpadlóval: 370–410 kp/m<sup>2</sup>  
hidegpadlóval: 490–530 kp/m<sup>2</sup>

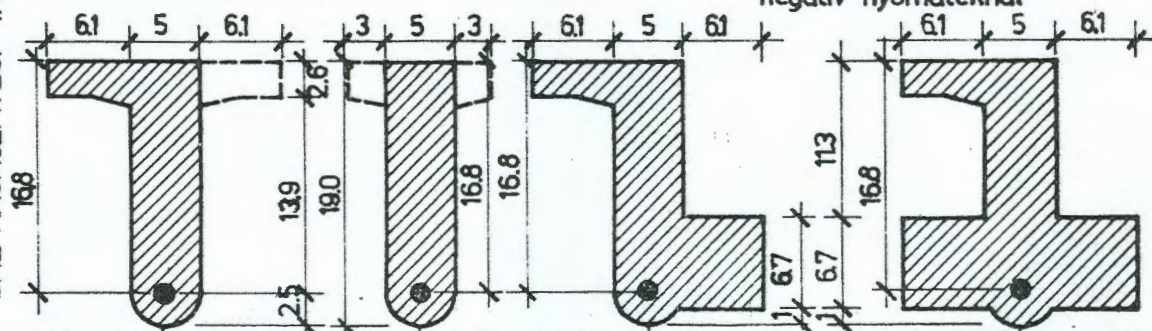
# AEROFIX





**M=1:5**

negatív nyomatéknál



normál bordakeresztmetszet

# GG-SZ FÖDÉNT

## 1. oldal: Bordakitérősek

egyoldali bordakiütés

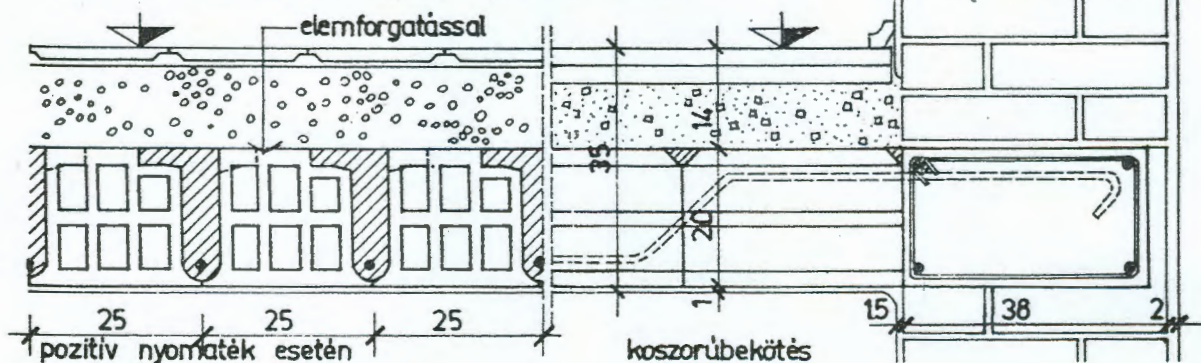
35cm vastug födém önsülya  
M=1:10 fapadlóval  
lapburkolattal

380-395  $\text{kp/m}^2$   
500-575  $\text{kp/m}^2$

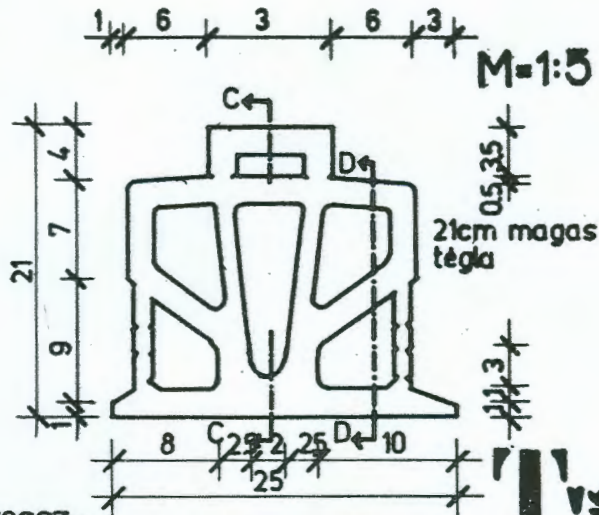
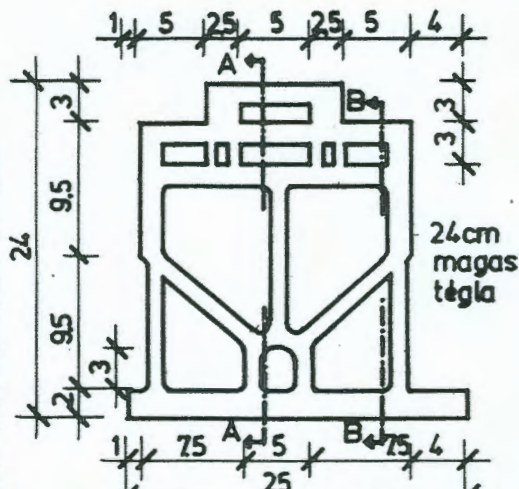


födernkeresztmetszetek<sup>1</sup> negatív nyomatek<sup>1</sup> esetén

-elemforgatással



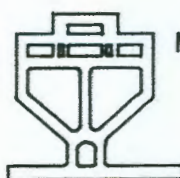
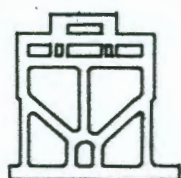




OPTIMA FÖDÉMTÉGLÁK KERESZT-ÉS HOSSZ-METSZETEI

OPTIMA

13  
a

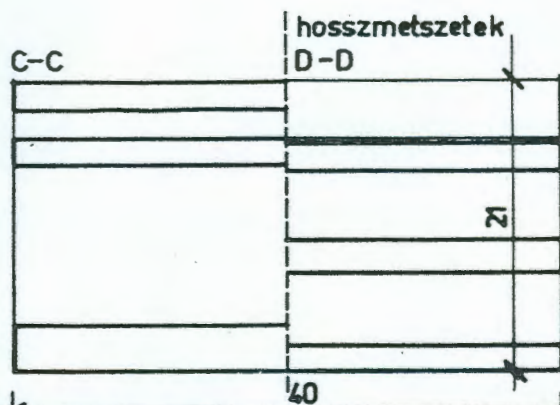
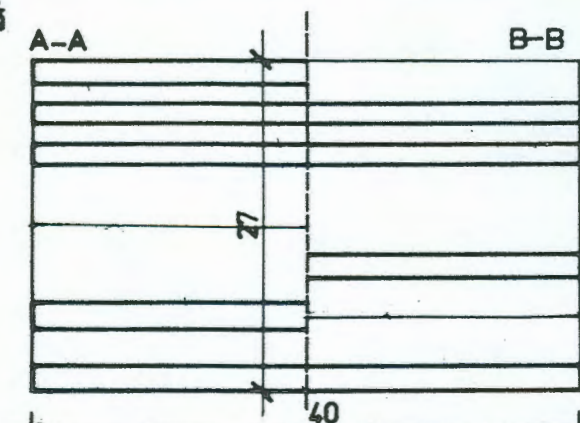


$M=1:10$

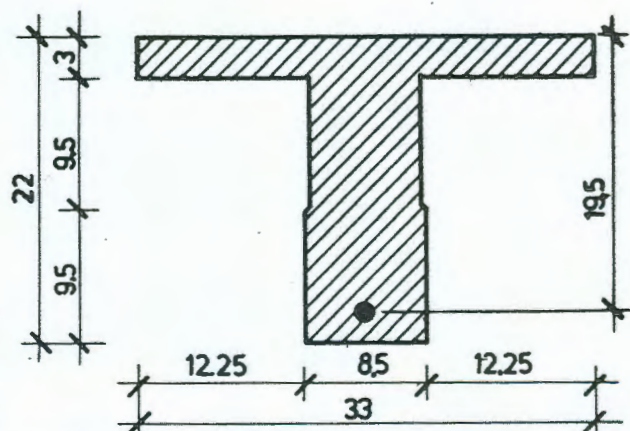
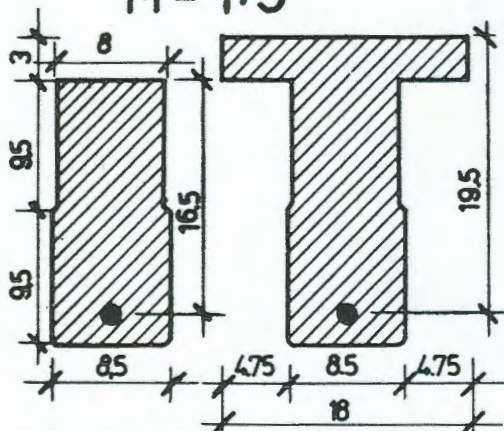


bordakiütés 24cm-es elemnél

bordakiütés 21cm-es elemnél

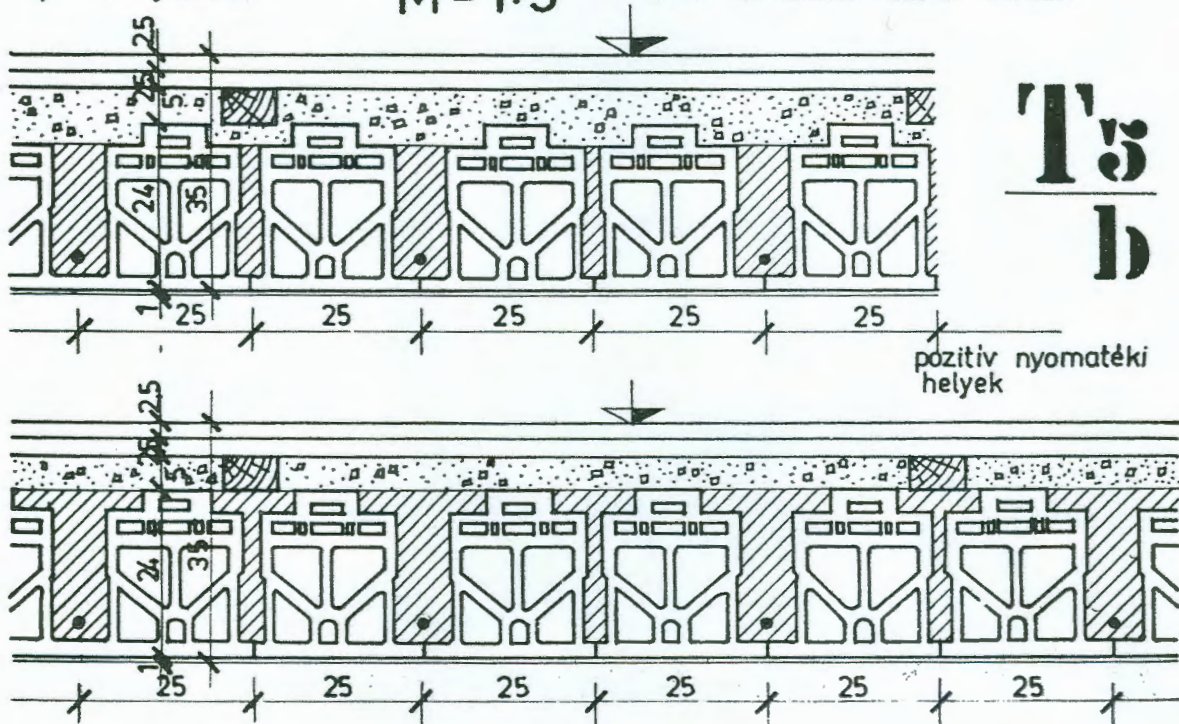


$M=1:5$



vasbeton bordakeresztmetszetek 24cm-es elemnél; pozitív nyomaték esetén



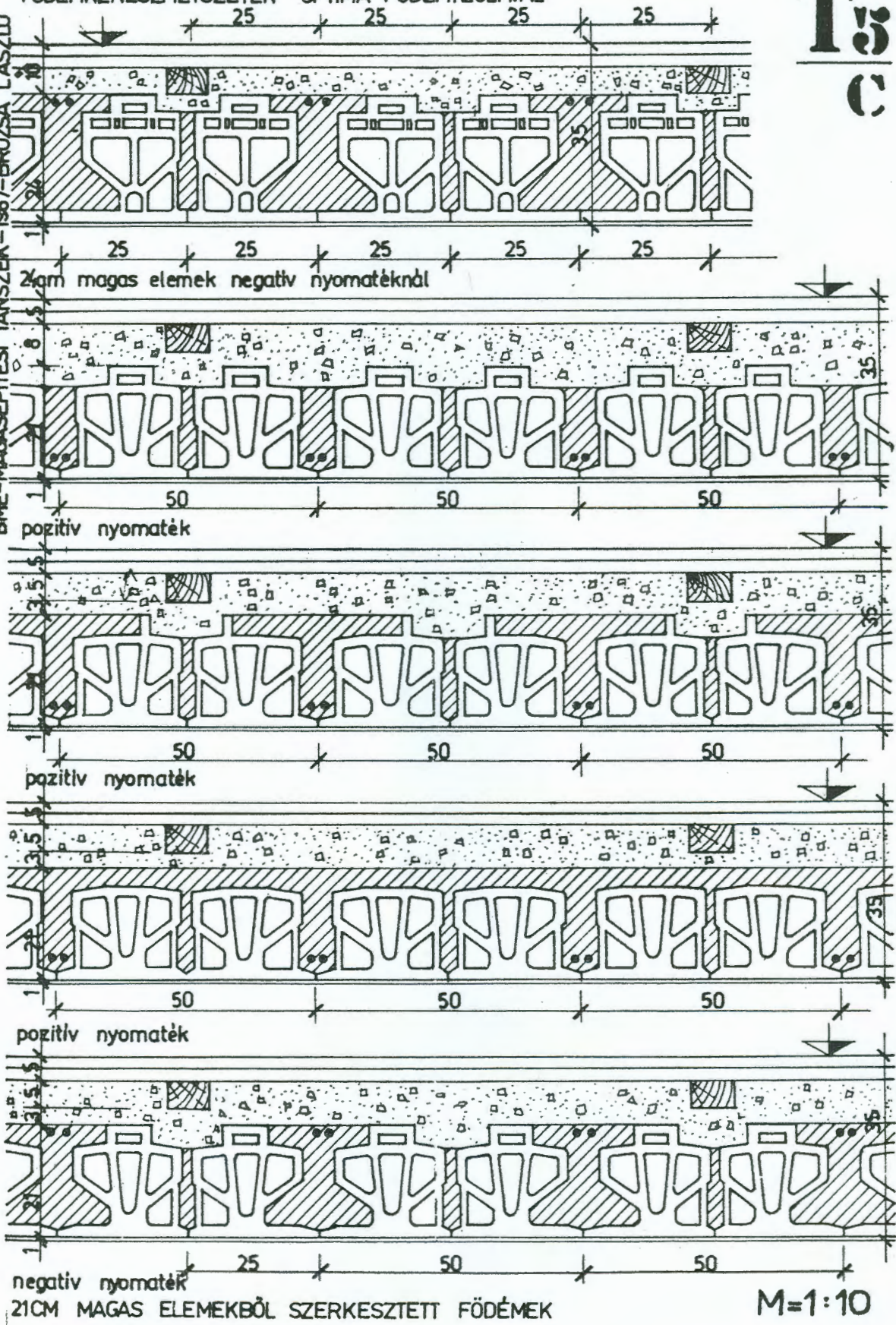
 $M=1:10$



BME-MAGASÉPÍTÉSI TANSZÉK-1967-BRUSZA LÁSZLÓ

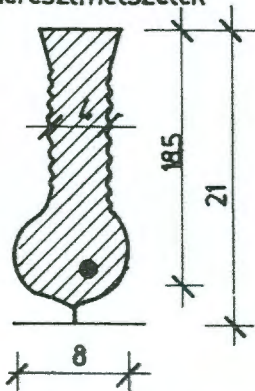
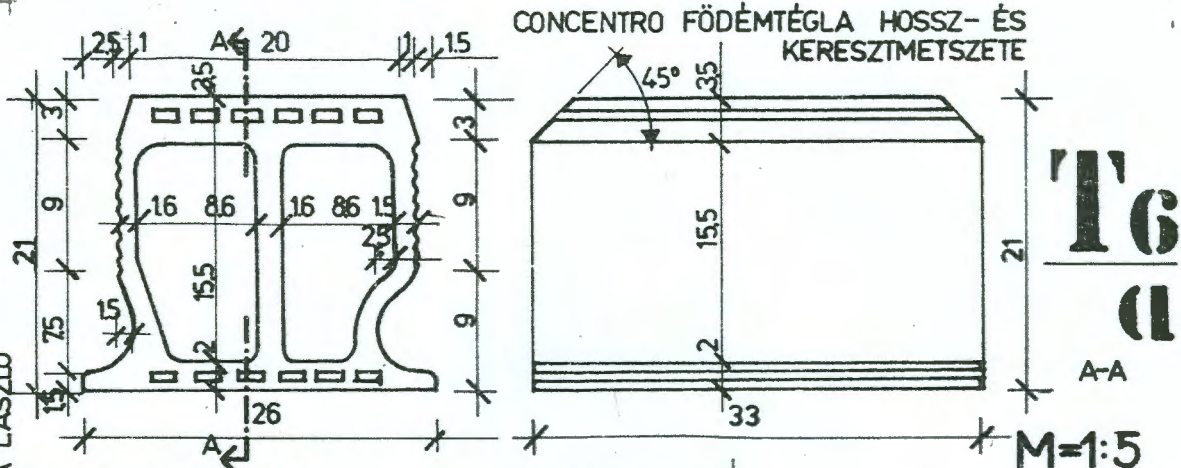
FÖDÉMKERESZMETSZETEK OPTIMA FÖDÉMTÉGLÁVAL

13  
c

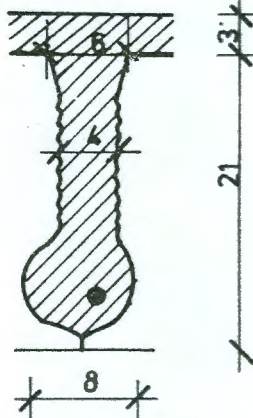


M=1:10

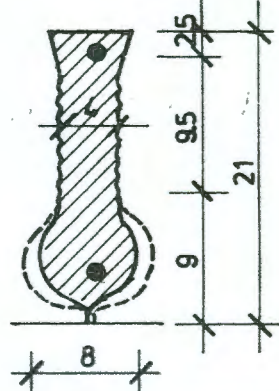




pozitív nyomaték helyén



pozitív nyomatékna  
felbetonozás esetén

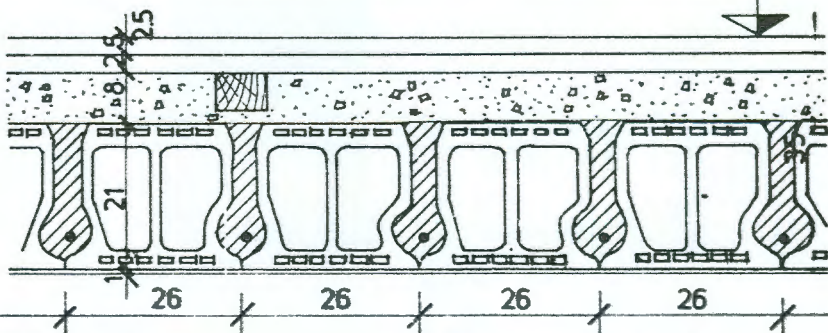


negatív nyomatéknál  
forgatott födémtéglával

**Alúl volt szerkezeti réteg súlya padló nélkül:**

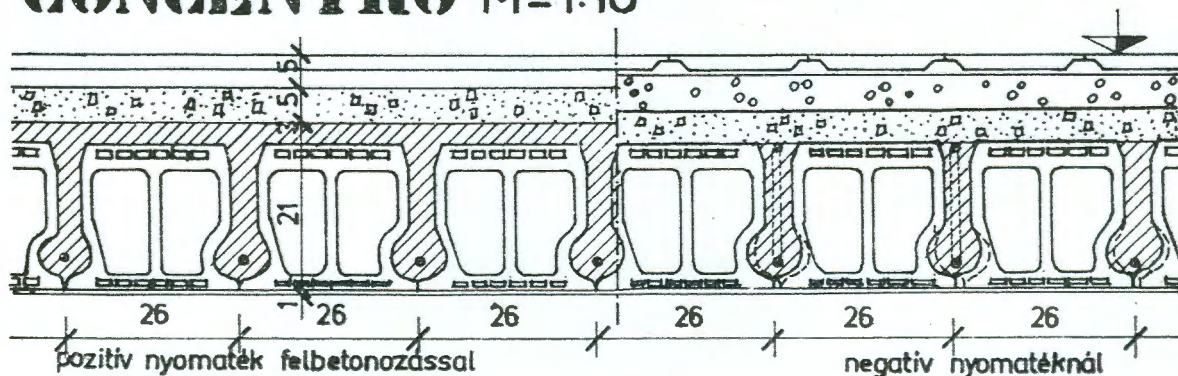
 $240 \text{ kPa/m}^2$ 

3cm felbetonnal:

 $305 \text{ kp/m}^2$ 

pozitív nyomaték helyén

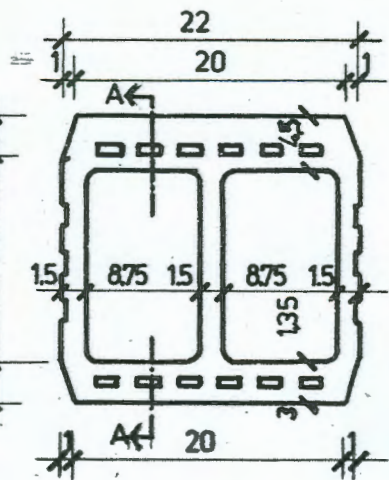
# CONCENTRO M=1:10



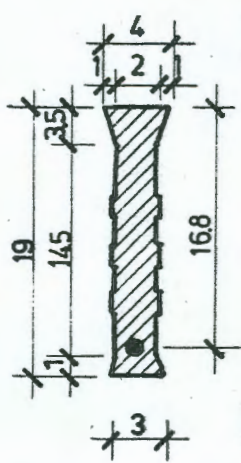
pozitív nyomaték felbetonozással

negatív<sup>1</sup> nyomatéknál

BME-MAGASÉPÍTÉSI TANSZÉK-1967-BRÜZSA LÁSZLÓ



acélbetétet  
tartó pálca



betonborda  
keresztmetszete

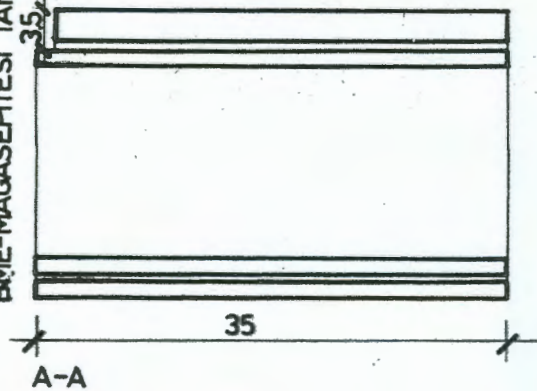
**T6**  
**b**

M = 1:5

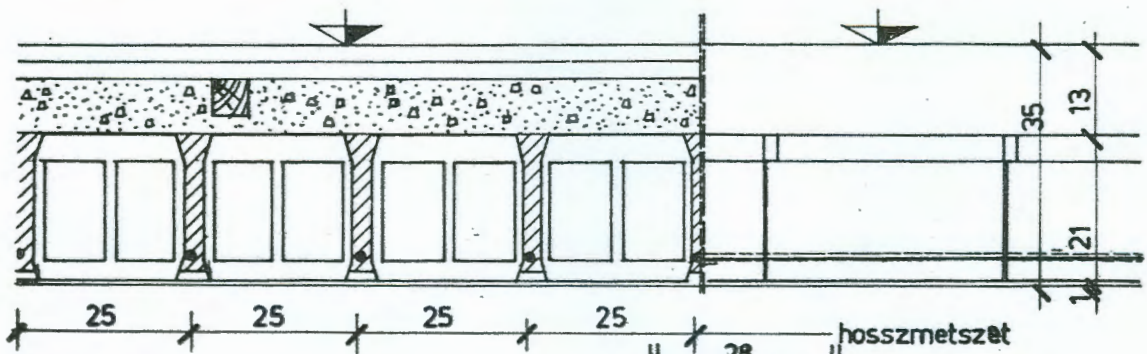
CONCENTRO FÖDENTÉGLA HOSSZ-  
ÉS KERESZTMETSZETE

35cm vastag  
födém szerkezet  
önsúlya:

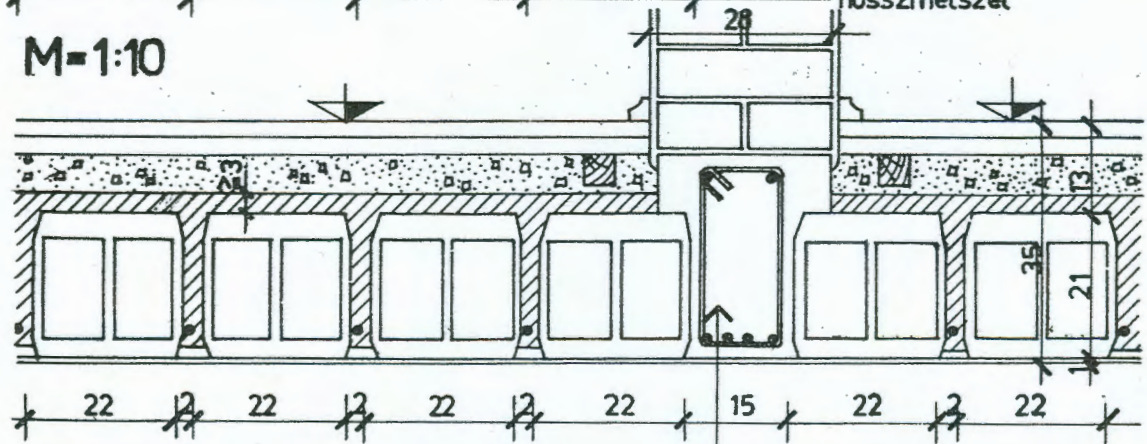
fa padlóval: 380-395 kp/m<sup>2</sup>  
hideg padlóval: 500-515 kp/m<sup>2</sup>



**CONCENTRO 2**



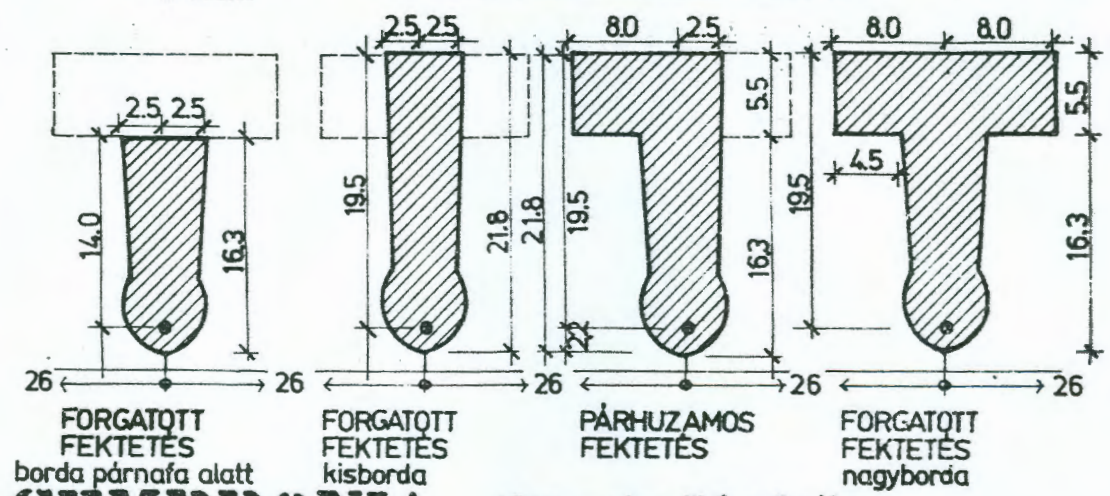
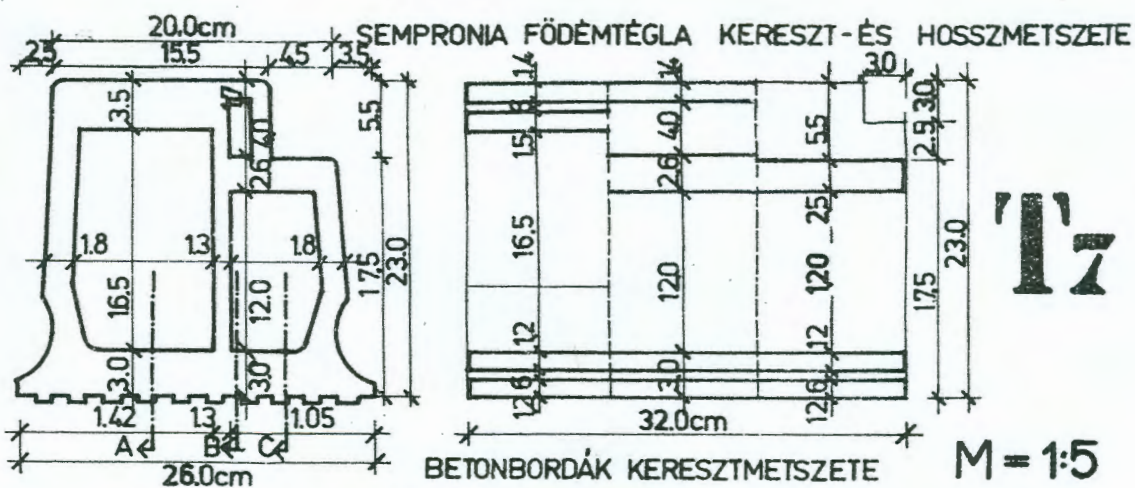
M = 1:10



födém metszet rábetonozással

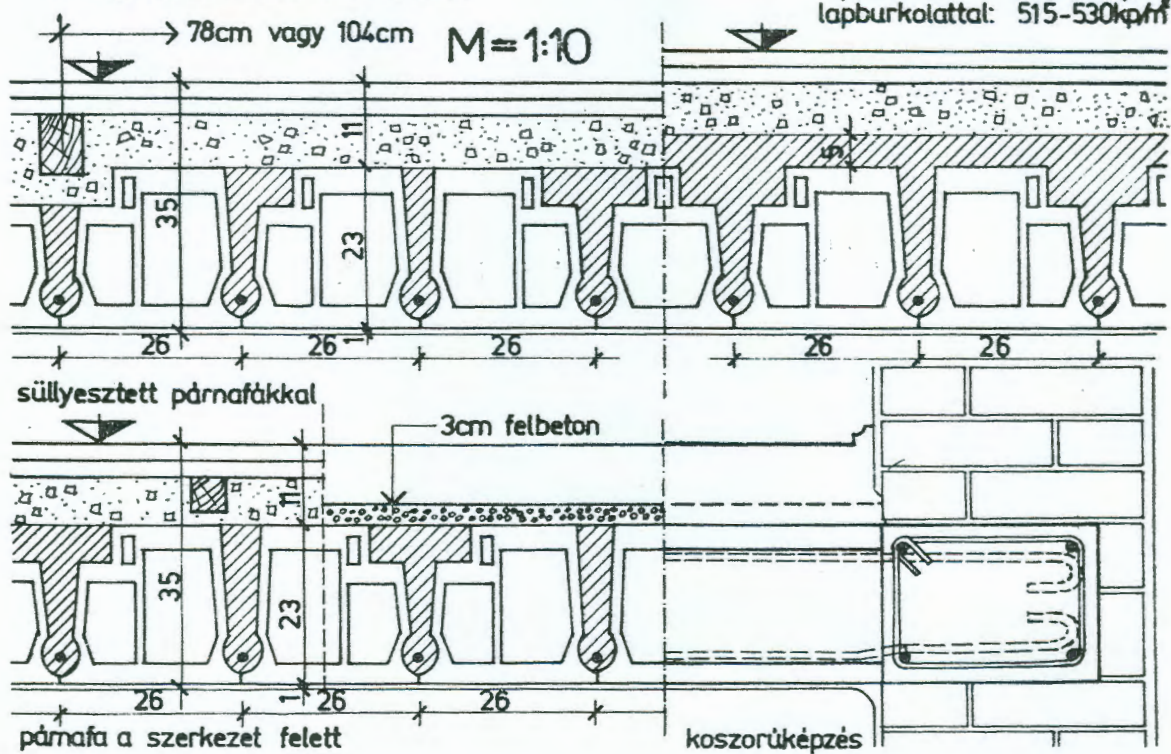
fejlemezes vasbeton  
kiváltó



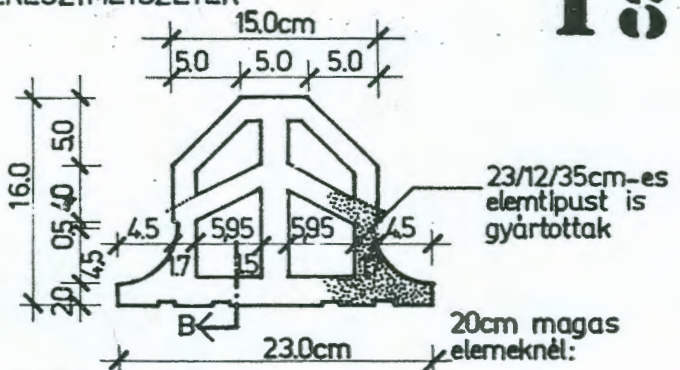
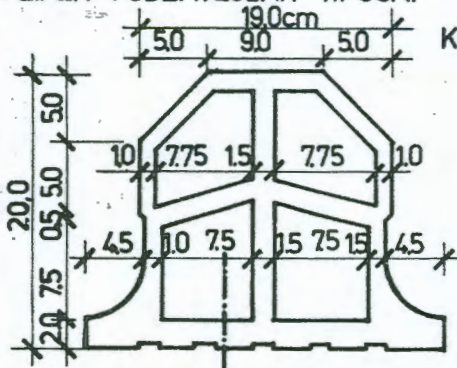


**SEMPRONIA**

35cm vastag födém önsúlya  
 fapadlóval: 395-410kp/m<sup>2</sup>  
 lapburkolattal: 515-530kp/m<sup>2</sup>





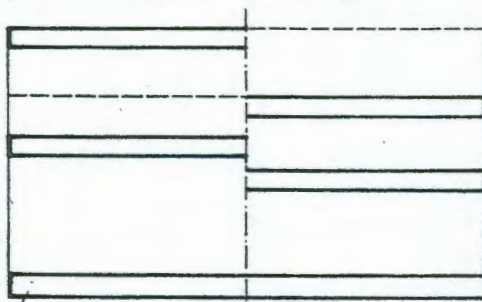


23/12/35cm-es  
elemtípust is  
gyártottak

20cm magas  
elemeknél:

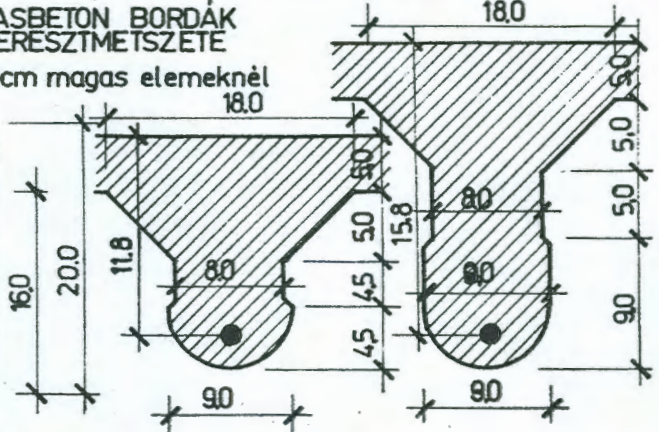
## HOSSZMETSZET

M=1:5



VASBETON BORDÁK  
KERESZTMETSZETE

16cm magas elemeknél



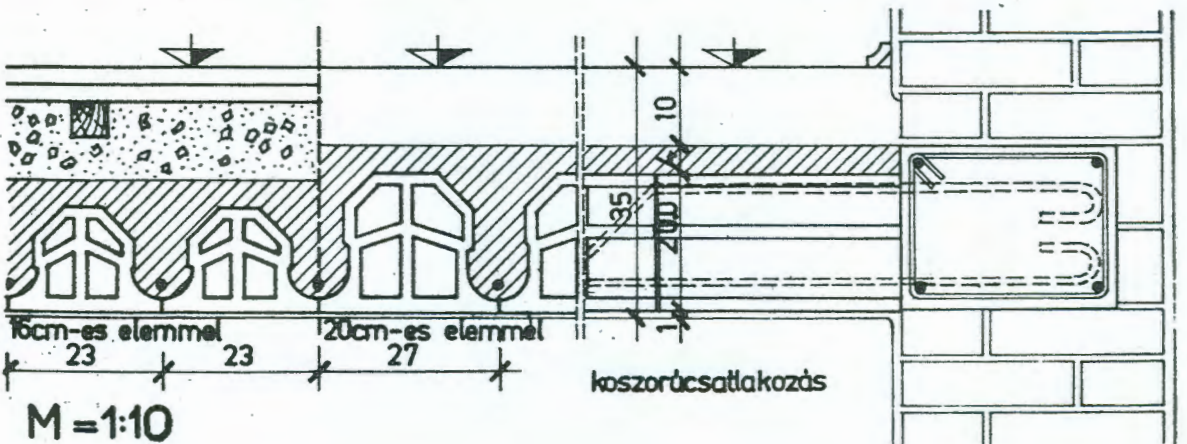
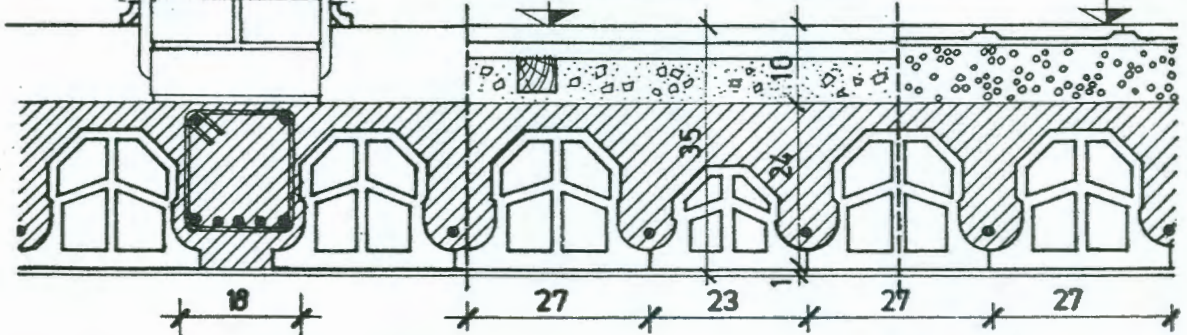
**falkiváltás  
födémbe.**

35cm vastag födém önsültya:

padloval: 430–445 kPa/m<sup>2</sup>

lapburkolattal: 550-565kp/m<sup>2</sup>

# PFEIFFER

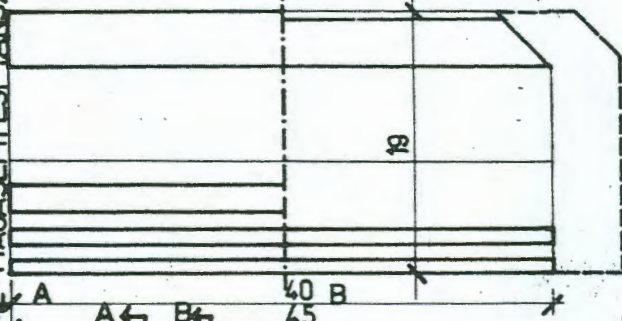
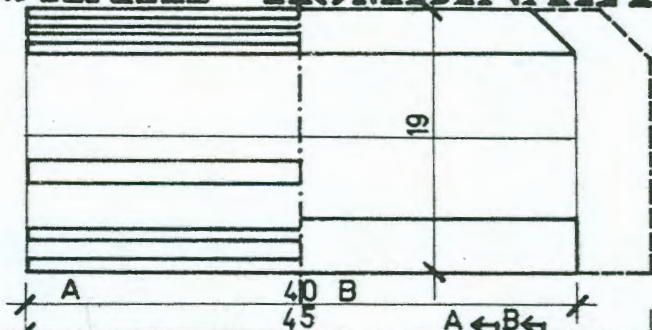
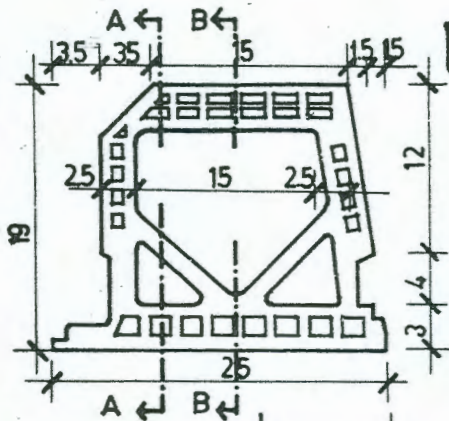


## köszorűcsatlakozás

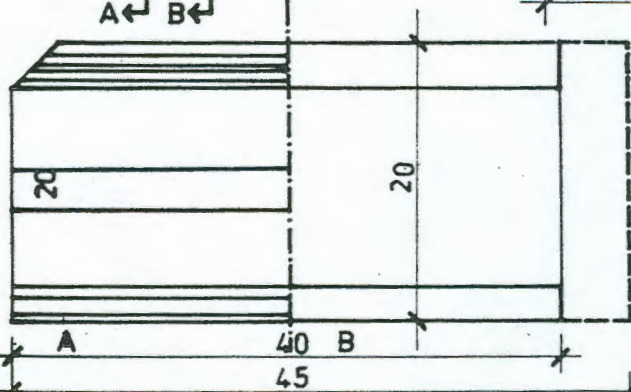
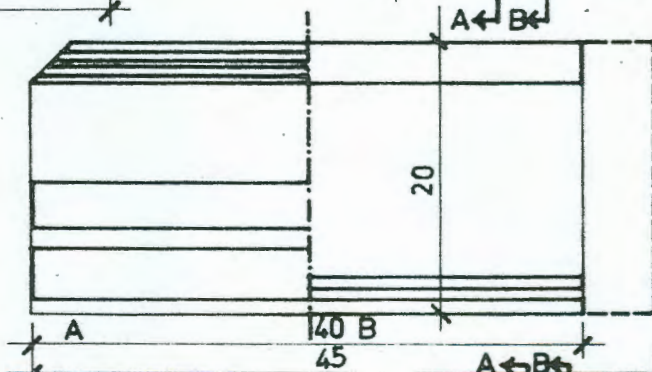
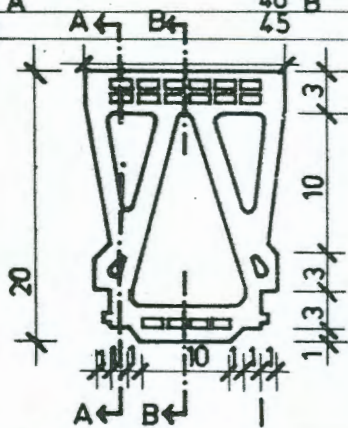
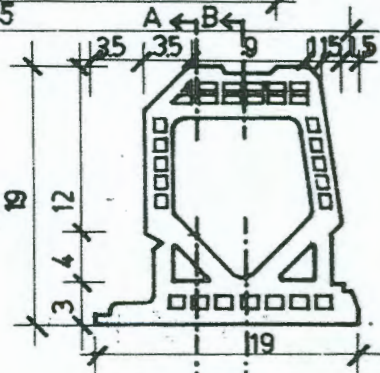
**M = 1:10**



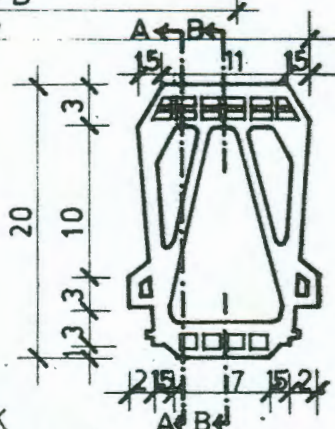
# UJLAKI KOMBINÁLT



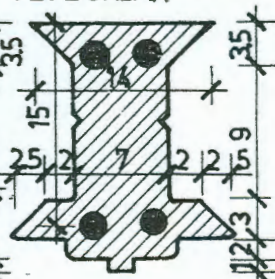
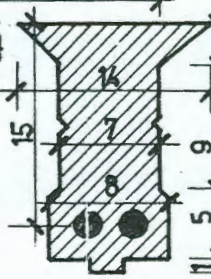
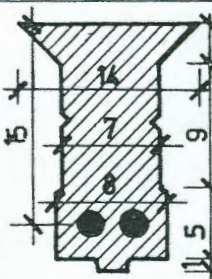
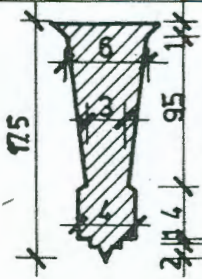
ÜREGES  
IDOMTESTEK



BORDAKÖZ  
NÖVELŐ  
BETÉTTESTEK



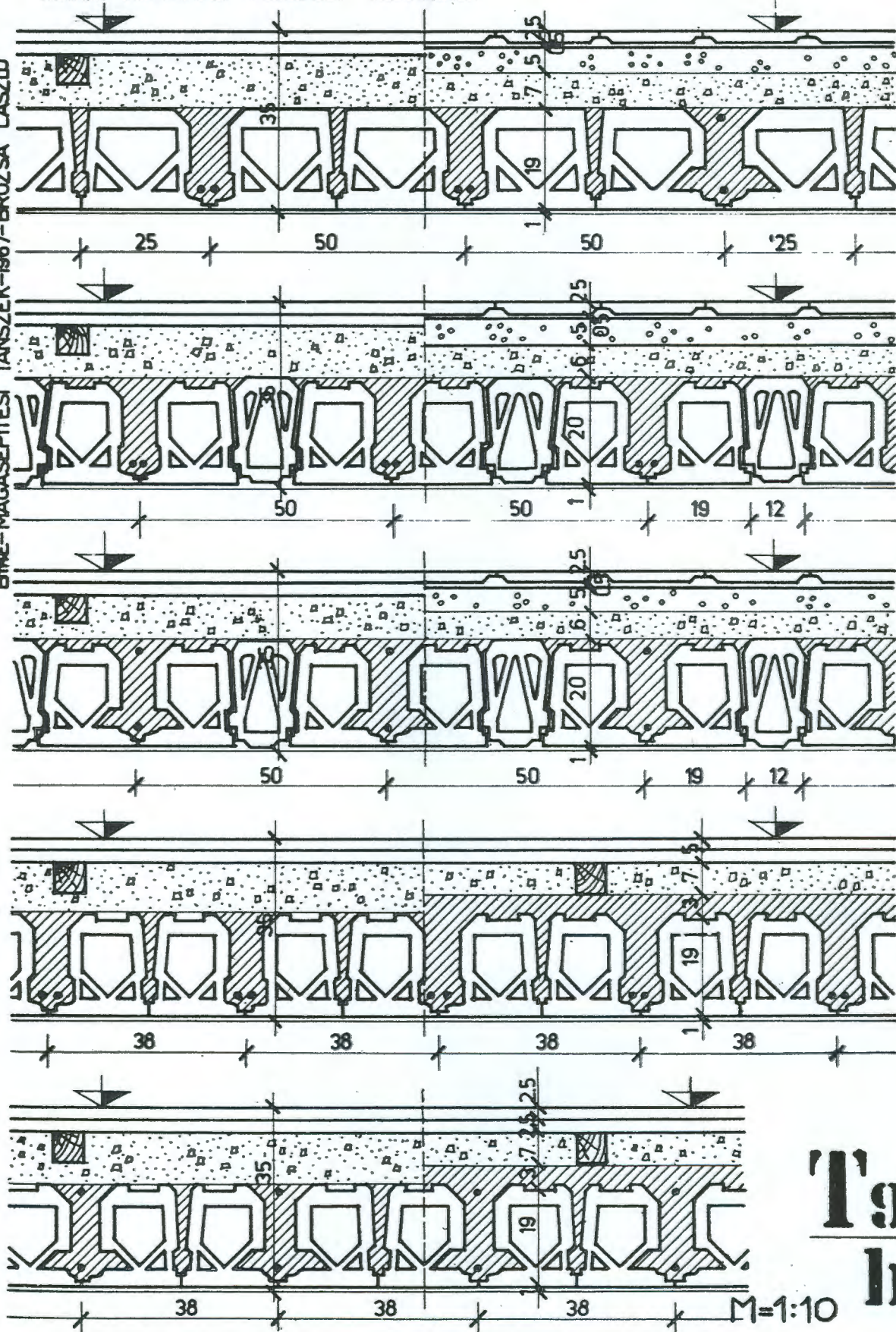
VB. BORDÁK





# UJLAKI KOMBINÁLT FÖDÉMEK METSZETEI

BMÉ-MAGASEPTÉSI TANSZÉK-1967-BRÜZSA LÁSZLÓ



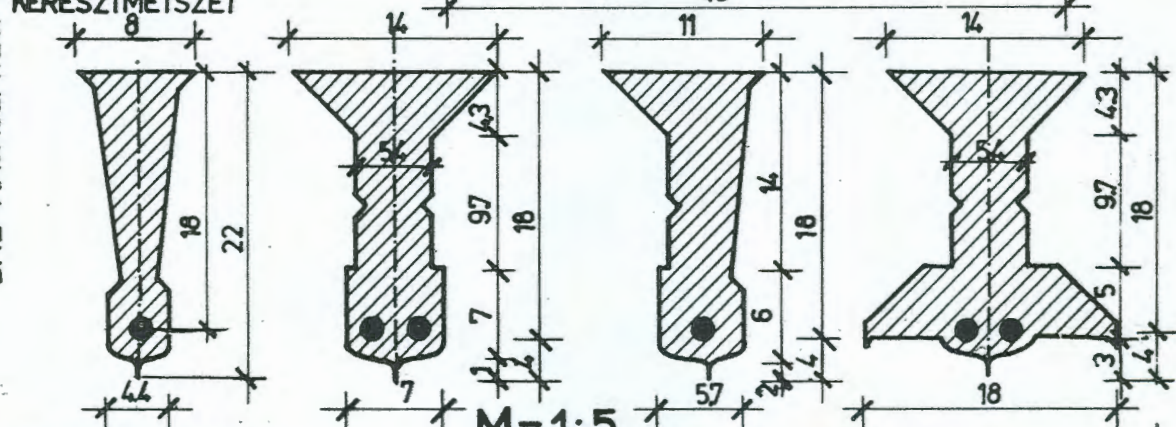
**T<sub>9</sub>**  
**b**

M=1:10





KERESZTMETSZET



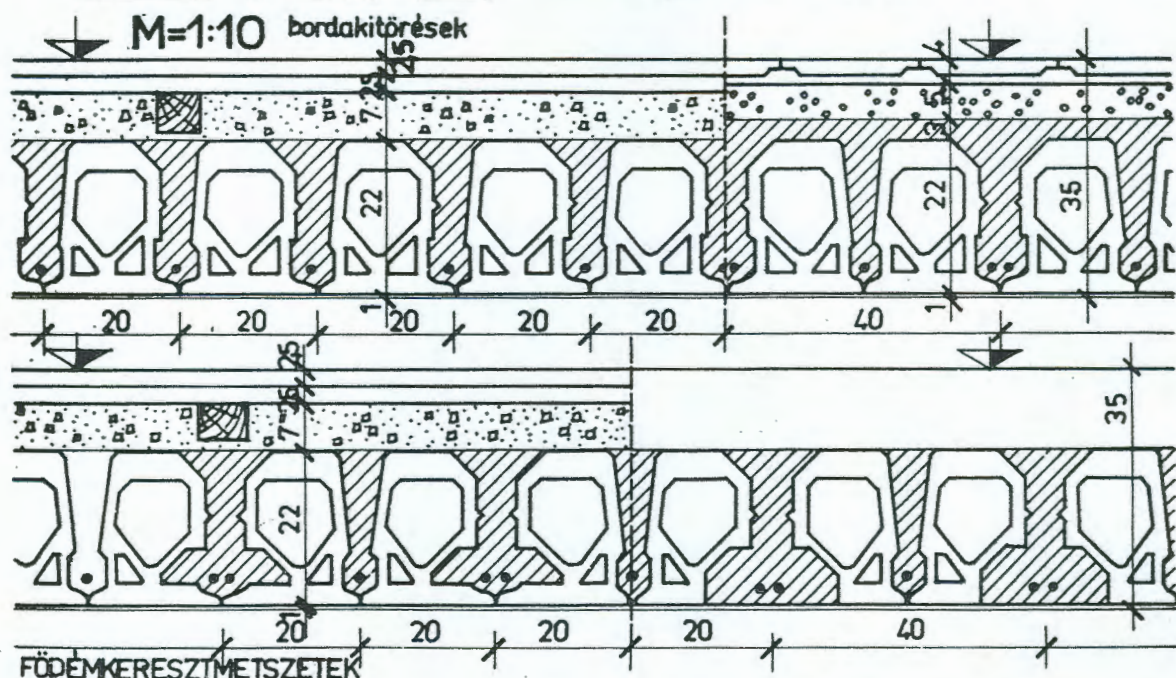
VASBETON BORDÁK

**UJLAKI 22**

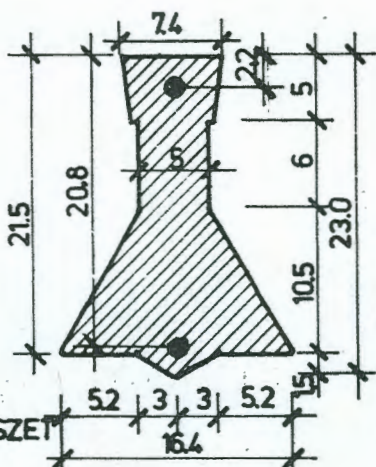
35cm vastag födém önsúlya:

fapadlóval 375 kp/m<sup>2</sup>  
hidegpadlóval 485 kp/m<sup>2</sup>

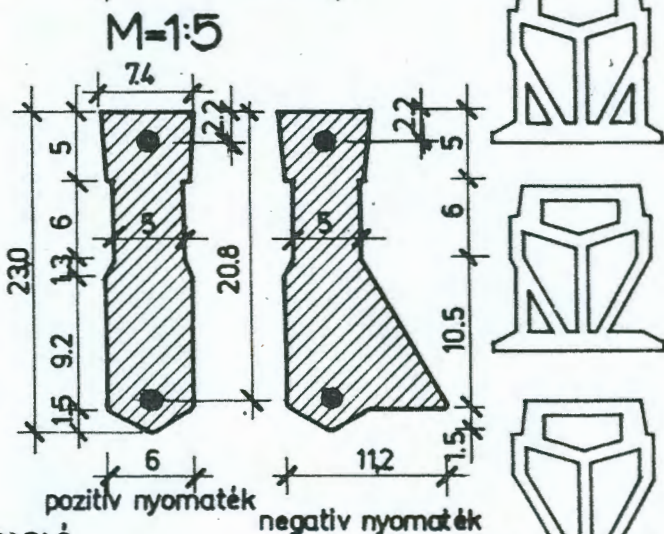
**T<sub>10</sub>**







**BORDAKERESZT-  
METSZETEK KI-  
TÜTT OLDALFALAK  
KAL/NEGATV NYO-  
MATÉK/**

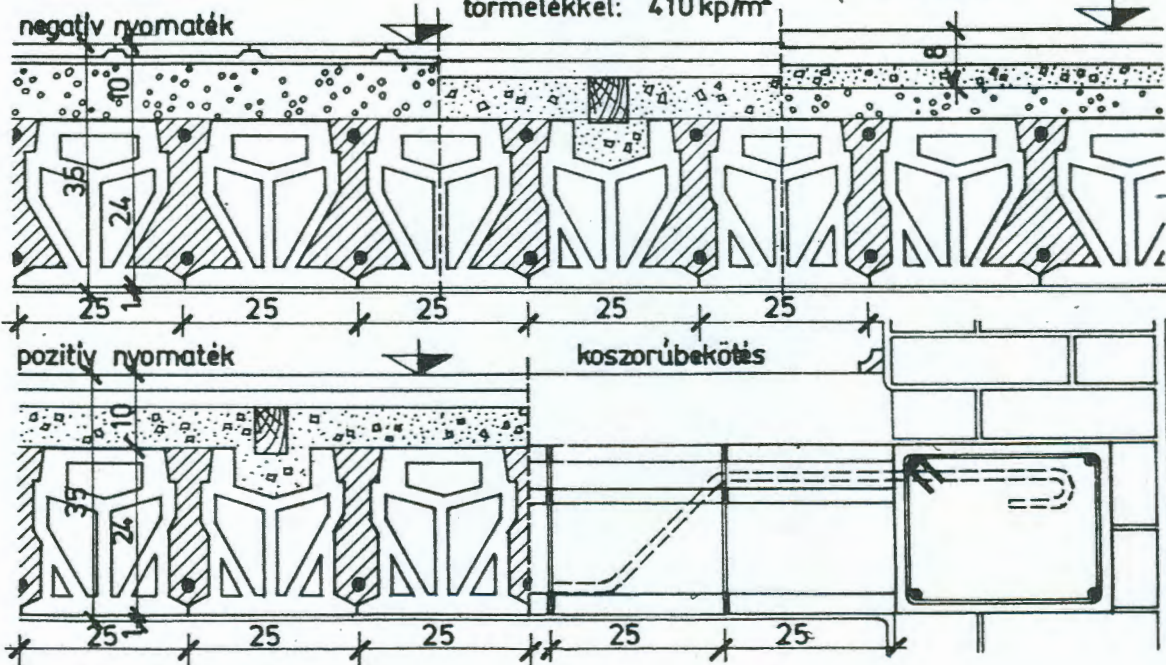


# BOHN

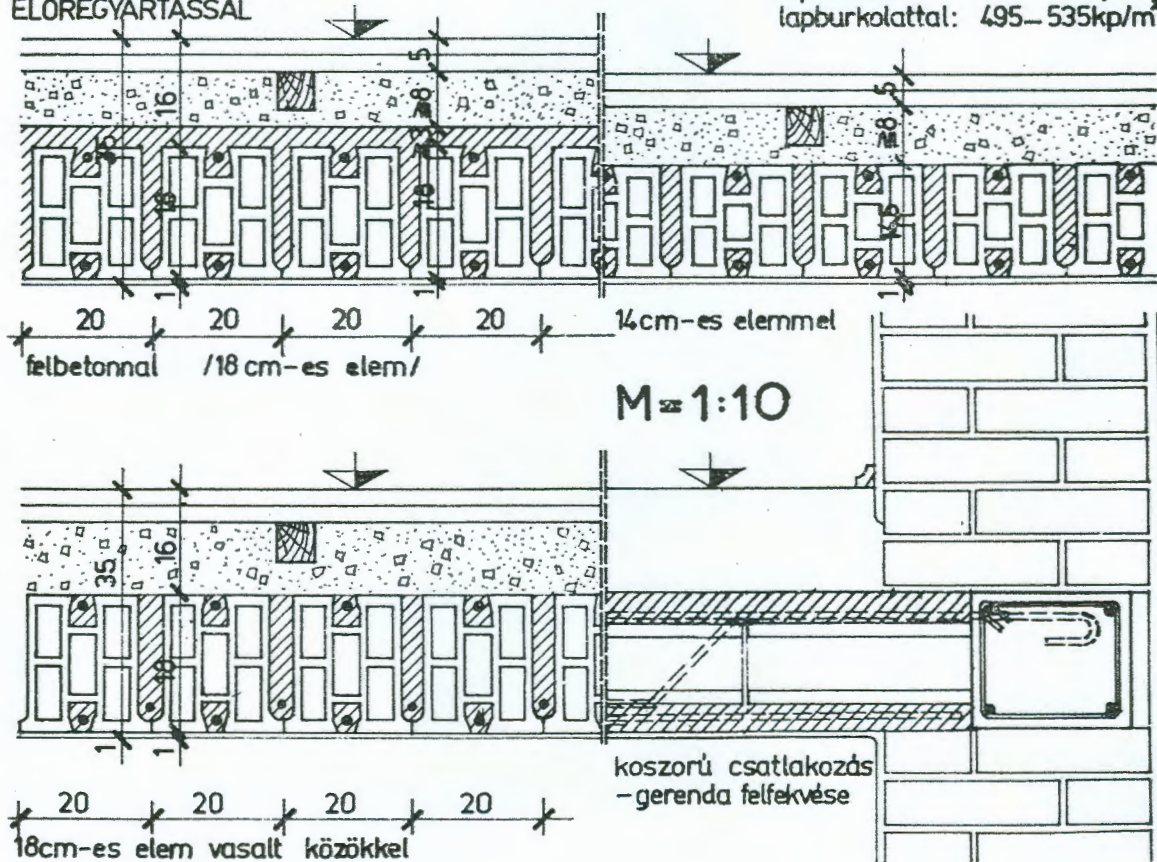
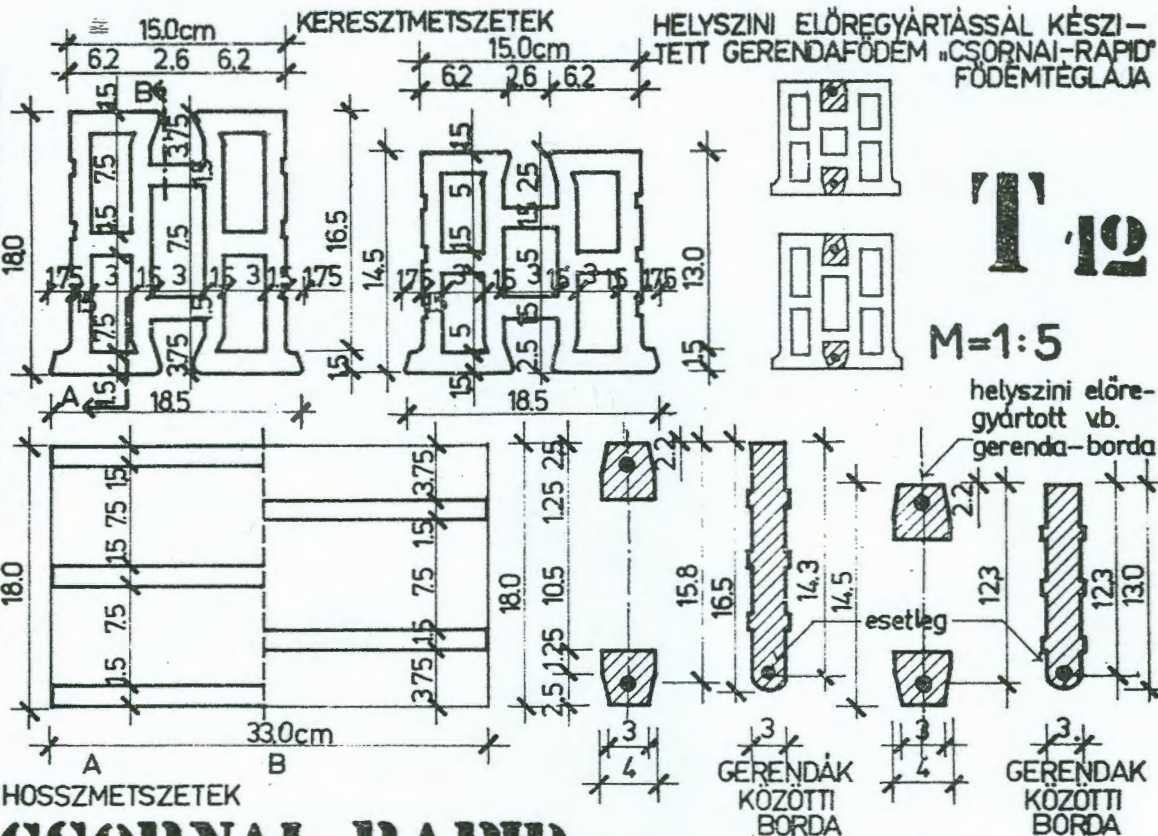
35cm vastag födém önsültya  
520-530kp/m<sup>2</sup>

35cm vastag földem önsúlya  
salakkal: 400 kp/m<sup>3</sup>  
törmelékkal: 410 kp/m<sup>3</sup>

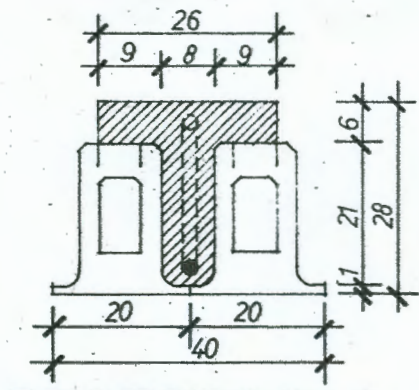
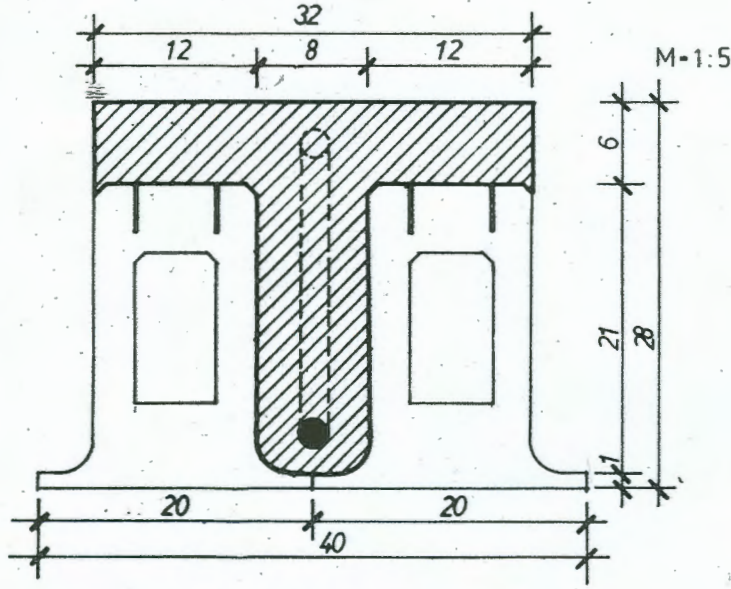
M-1:10





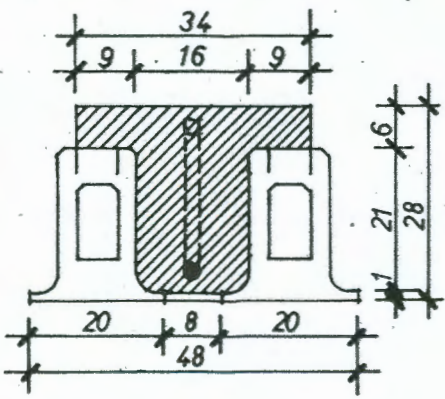
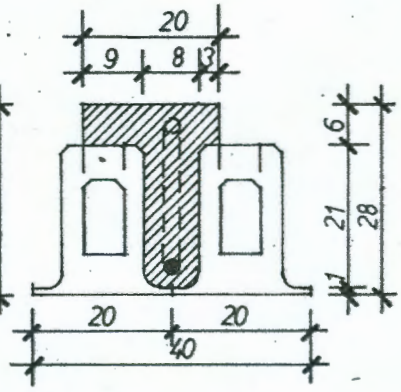
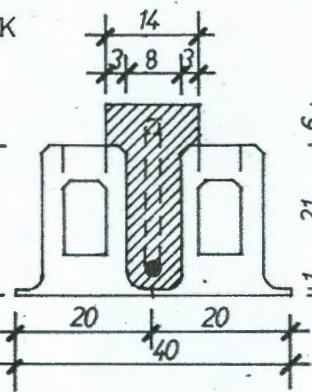
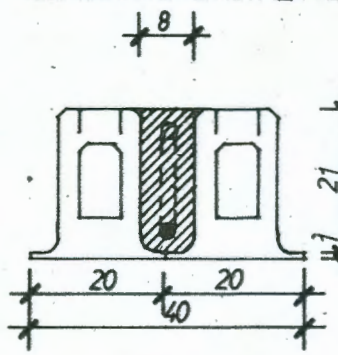




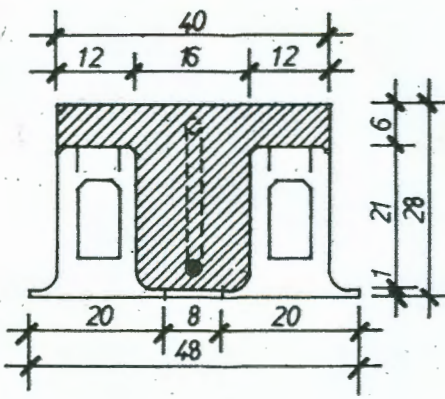
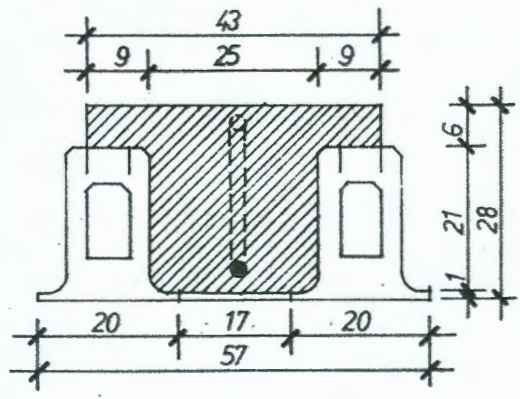


# UNIVERSAL 24

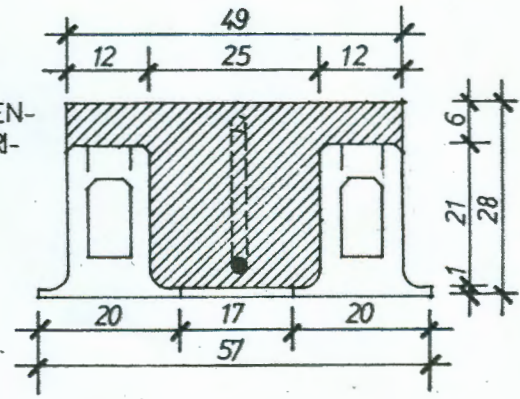
GERENDAKÉRSZTMETSZETEK



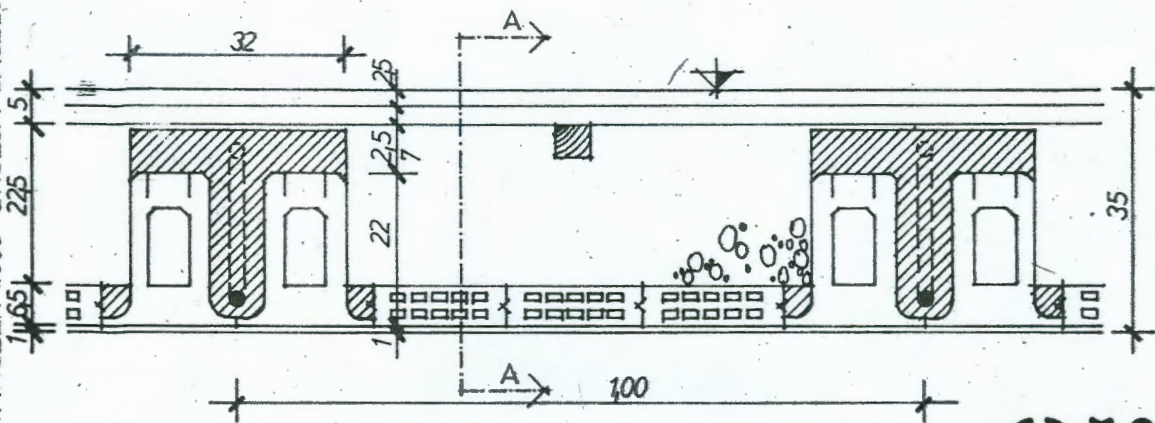
M=1:10



ELTÉRŐ GEREN-  
DA MÉRETVARIA-  
NCSOK

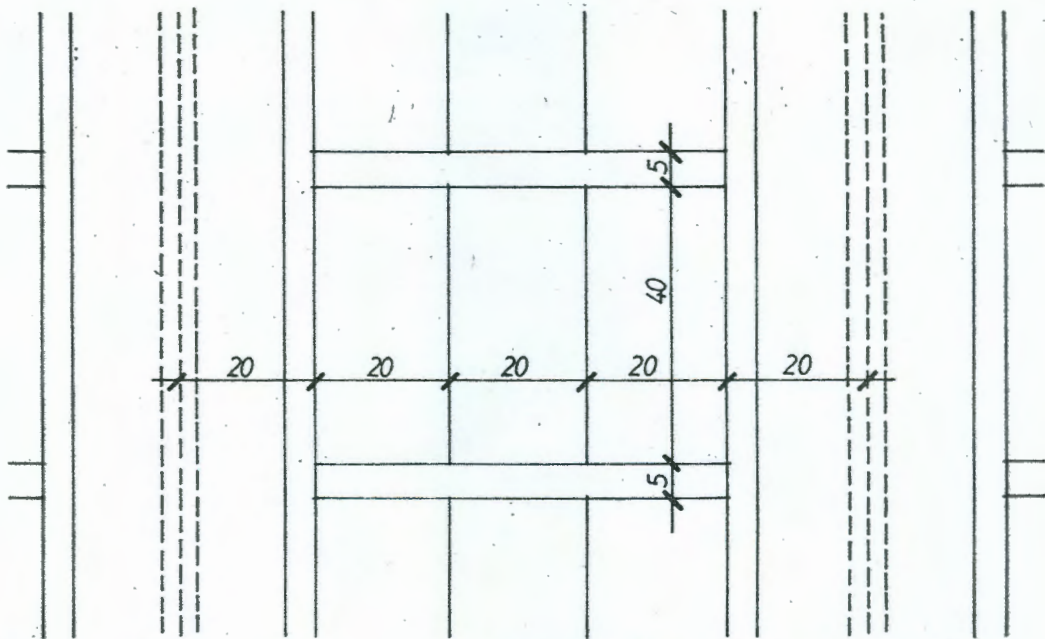




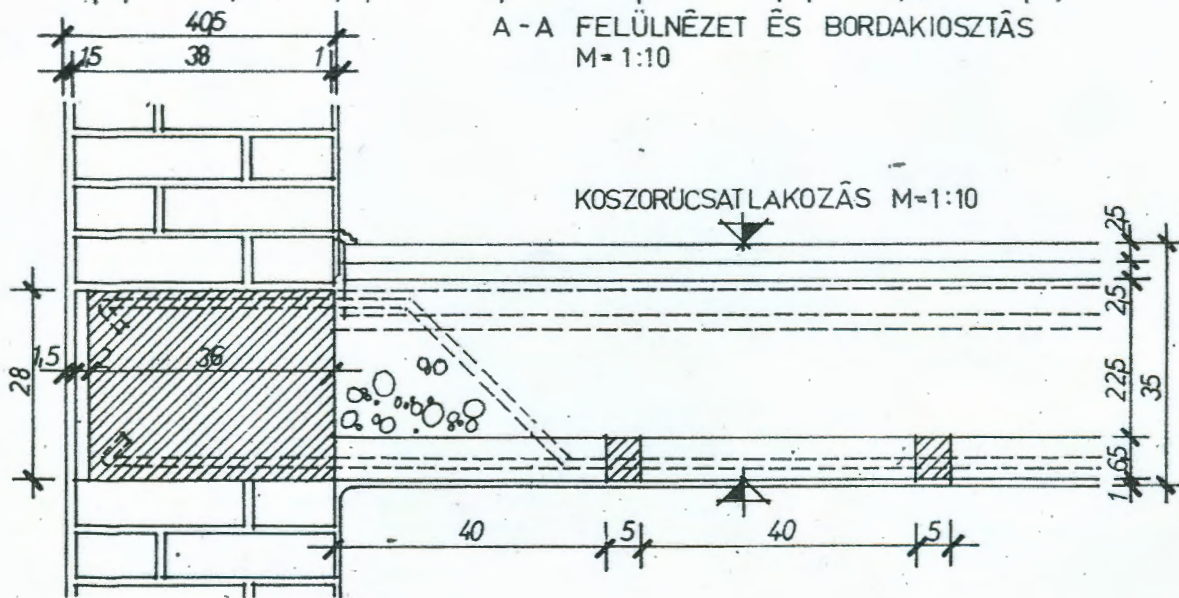


**UNIVERSAL** FÖDÉMMETSZET M=1:10  
FÖDÉMSÜLY-435-595 KG/m<sup>2</sup>

25



A - A FELÜLNÉZET ÉS BORDAKIOSZTÁS  
M= 1:10



KOSZORÚCSATLAKOZÁS M=1:10